

# SEVEN PORTALS STUDY


## *An Investigation of Economic Development in North Carolina Through Logistics Villages*

Northeast Region


Final Report



December 31, 2011



Cover illustrations by Sherman Architect, PLLC  
Used with permission from the Piedmont Triad Partnership



## TECHNICAL REPORT DOCUMENTATION PAGE

Report No. <b>FHWA/NC/2010-34-1</b>		Government Accession No.		Recipient's Catalog No.	
4. Title and Subtitle <b>Seven Portals Study: An Investigation of Economic Development in North Carolina Through Logistics Villages – Northeast Region Report</b>				Report Date <b>December 31, 2011</b>	
				Performing Organization Code	
Author(s) <b>Leslie Pagliari, Richard Monroe, and Paul Kauffmann</b>				Performing Organization Report No.	
Performing Organization Name and Address <b>East Carolina University  Industrial Distribution and Logistics Greenville, NC 27858</b>				Work Unit No. (TRAIS)	
				Contract or Grant No.	
Sponsoring Agency Name and Address <b>North Carolina Department of Transportation Research and Analysis Unit 104 Fayetteville Street, Room 268 Raleigh, NC 27601</b>				Type of Report and Period Covered  <b>Final Report July 1, 2010 – December 31, 2011</b>	
				Sponsoring Agency Code <b>2010-34</b>	
Supplementary Notes:					
<p>Abstract</p> <p>The goal of this study was investigating potential logistics villages within one of the seven economic development regions across the state, specifically the Northeast Region. The initial focus was proximity for air, rail, and highway connectivity at potential sites, but the study discovered other possibilities for successful villages. Each village is evaluated for strengths, weaknesses, and needs, with emphasis on identifying what infrastructure improvements are needed to support such a village at that location. The study does not recommend specific sites above others. The major findings from this study are incorporated into a master report covering the entire state titled <i>Seven Portals Study – An Investigation of How Economic Development Can be Encouraged in North Carolina Through Infrastructure Investment</i>.</p> <p>Through research, data analyses, and outreach efforts to businesses, economic development offices, local officials, and planning offices, five potential logistics villages were investigated for their strengths, weaknesses and needs in support of major shipment activity. The region is focusing business development in these areas: automotive, aviation, boatbuilding and maritime trades, heritage tourism, inner coastal development, life sciences and biotechnology, homeland security, renewable energy, and transportation/warehousing/logistics.</p>					
Key Words <b>Logistics, Freight Shipments, Land Development, Cargo, Commodity, Infrastructure, Logistics Village, Distribution Center</b>				Distribution Statement	
Security Classif. (of this report) Unclassified		Security Classif. (of this page) Unclassified		No. of Pages 105  Price	

---

# **Seven Portals Study**

## ***An Investigation of Economic Development in North Carolina Through Logistics Villages***

### **NORTH CAROLINA'S NORTHEAST REGION REPORT**

**By**

**Leslie Pagliari, Ph.D.**

Associate Dean, College of Technology and Computer Science  
East Carolina University

**Richard Monroe, Ph.D.**

Associate Professor, Industrial Distribution and Logistics  
East Carolina University

**Paul Kauffmann, Ph.D., P.E.**

Professor, Department of Engineering  
East Carolina University

**For the**

**Governor's Logistics Task Force  
and**

**The North Carolina Department of Transportation**

**Final Report**

**December 31, 2011**

---

---

## **Disclaimer**

The contents of this report reflect the views of the authors and not necessarily the views of the University. The authors are responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the North Carolina Governor's Office, the North Carolina Department of Transportation, the North Carolina Department of Commerce, nor any other state agency or state authority at the time of publication. This report does not constitute a standard, specification, or regulation.

## Acknowledgements

This regional study was accomplished through the dedicated efforts of a small study team which is part of a much larger study team looking at both statewide issues and other commerce regions. The study team members for this region included:

### **East Carolina University Team**

**Leslie Pagliari, Ph.D.** - Associate Dean, College of Technology and Computer Science, investigator and writer.

**Richard Monroe, Ph.D.** - Associate Professor, Industrial Distribution and Logistics, lead investigator and lead writer.

**Paul Kauffmann, Ph.D., P.E.** - Professor, Department of Engineering, investigator and writer.

The study team greatly appreciates all the support given to the team from Mr. Charles Diehl and Mr. Roberto Canales, P.E., with the Department of Transportation, and Mr. Joseph “Jed” McMillan, DOT/Commerce Advisor. These individuals provided significant support and participation in meetings, visioning sessions, and presentations. Additionally, the team expresses appreciation to all individuals contacted for input and feedback on this study. The information shared with the study team members was critical to our understanding of the issues facing the state and possible actions for the state to address these issues. Lastly, the team appreciates the guidance and input from Dr. George List, Principal Investigator for the project, and Dr. Larry Goode, consultant and Steering Group member in helping shape the overall approach for data collection, analysis, and reporting results.



# Table of Contents

<b>EXECUTIVE SUMMARY .....</b>	<b>1</b>
<b>1 INTRODUCTION.....</b>	<b>5</b>
1.1 OVERVIEW OF THE REGION .....	5
1.2 NORTHEAST PARTNERSHIP .....	9
1.3 REGIONAL DATA .....	10
1.4 REGIONAL DATA FOR HAMPTON ROADS IN VIRGINIA .....	17
<b>2 POTENTIAL LOGISTICS VILLAGES.....</b>	<b>21</b>
2.1 LOGISTICS VILLAGE 1 – AHOSKIE AREA .....	21
2.2 LOGISTICS VILLAGE 2 – EDENTON AREA .....	25
2.3 LOGISTICS VILLAGE 3 – ELIZABETH CITY AREA .....	28
2.4 LOGISTICS VILLAGE 4 – WILLIAMSTON AREA.....	34
2.5 LOGISTICS VILLAGE 5 – “IMPORT/EXPORT MEGASITE” VILLAGE FOR THE NORTHEAST REGION .....	37
<b>3 REGIONAL SUMMARY.....</b>	<b>43</b>
3.1 LIFE SCIENCES AND BIOTECHNOLOGY .....	49
3.2 AVIATION.....	50
3.3 RENEWABLE ENERGY OR “GREEN” ENERGY.....	51
3.4 BOATBUILDING/MARINE TRADES .....	52
3.5 RELATIONSHIPS WITH PORT OF VIRGINIA.....	52
<b>4 REFERENCES.....</b>	<b>58</b>
<b>APPENDICES.....</b>	<b>60</b>
APPENDIX A: SLIDES FROM THE GOVERNOR’S LOGISTICS TASK FORCE MEETING ON DECEMBER 15, 2010.....	60
APPENDIX B: INTERVIEW WITH NORTHEAST COMMISSION OFFICIAL .....	66
APPENDIX C: INTERVIEW WITH NORTHEAST COMMISSION OFFICIAL.....	70
APPENDIX D: INTERVIEW WITH BEAUFORT COUNTY ECONOMIC DEVELOPMENT OFFICIAL.....	73
APPENDIX E: INTERVIEW WITH ALBEMARLE ECONOMIC DEVELOPMENT COMMISSION OFFICIAL .....	75
APPENDIX F: INTERVIEW WITH NORTHEAST COMMISSION OFFICIALS .....	78
APPENDIX G: INTERVIEW AND SITE VISIT WITH WAYNE HARRIS, DIRECTOR, ALBEMARLE ECONOMIC DEVELOPMENT COMMISSION (AEDC) .....	82
APPENDIX H: ATTENDANCE AT NEED MONTHLY MEETING .....	86
APPENDIX I: INTERVIEW WITH NORTHEASTERN REGIONAL AIRPORT MANAGER .....	87



APPENDIX J: INTERVIEW WITH SIMON RICH, III, OWNER/OPERATOR OF STEVENS TOWING (BARGE SERVICE) .....	89
APPENDIX K: PRELIMINARY RAIL FINDINGS FOR NORTHEAST REGION.....	91

## List of Tables

TABLE 1-1: WORKER TRAVEL TIME.....	11
TABLE 1-2: EMPLOYMENT OVERVIEW FOR THE NORTHEAST REGION.....	12
TABLE 1-3: INDUSTRY OVERVIEW FOR THE REGION .....	14
TABLE 1-4: POPULATION TRENDS BY COUNTY .....	15
TABLE 1-5: REGIONAL LABOR STATISTICS .....	16
TABLE 1-6: 2010 MANUFACTURING COMPANIES IN HAMPTON ROADS (50+ EMPLOYEES AND NAICS 3XX CODES).....	20
TABLE 3-1: ASSESSMENT MATRIX .....	45

## List of Figures

FIGURE 2-1: AERIAL VIEW OF LOGISTICS VILLAGE 1 AHOSKIE SITE .....	23
FIGURE 2-2: LOGISTICS VILLAGE 1 AHOSKIE SITE 30-MINUTE DRIVE TIME.....	24
FIGURE 2-3: AERIAL VIEW OF LOGISTICS VILLAGE 2 EDENTON SITE.....	26
FIGURE 2-4: LOGISTICS VILLAGE 2 EDENTON SITE 30-MINUTE DRIVE TIME.....	27
FIGURE 2-5: AERIAL VIEW OF LOGISTICS VILLAGE 3 ELIZABETH CITY SITE .....	28
FIGURE 2-6: LOGISTICS VILLAGE 3 ELIZABETH CITY SITE 30-MINUTE DRIVE TIME.....	32
FIGURE 2-7: AERIAL VIEW OF LOGISTICS VILLAGE 4 WILLIAMSTON SITE.....	34
FIGURE 2-8: LOGISTICS VILLAGE 4 WILLIAMSTON SITE 30-MINUTE DRIVE TIME .....	36
FIGURE 2-9: 45-MINUTE DRIVE TIME FROM THE CENTER POINT .....	41

## Executive Summary

This report presents alternative plans and visions for logistics villages as potential economic development catalysts for the Northeast Region of North Carolina. The investigation of the strengths, features and needs of the Northeast Region has been accomplished through a series of phone interviews, in-person interviews, site visits, extensive research of economic development materials, and other data sources such as Employment Security Commission data and the EDIS system for North Carolina.

The goal of this study was investigating potential logistics villages within one of the seven economic development regions across the state. The initial focus was proximity for air, rail, and highway connectivity at potential sites, but the study discovered other possibilities for successful villages. Each village is evaluated for strengths, weaknesses, and needs, with emphasis on identifying what infrastructure improvements are needed to support such a village at that location. The study does not recommend specific sites above others. The major findings from this study are incorporated into a master report covering the entire state titled *Seven Portals Study – An Investigation of How Economic Development Can be Encouraged in North Carolina Through Infrastructure Investment*.

The economic development professionals in North Carolina’s Northeast Region (NCNE) are focusing on existing industrial clusters and the foundation companies in those clusters which the Region hopes to leverage to create industry synergies in the future in the following areas:

- **Automotive**
- **Aviation**
- **Boatbuilding/Marine Trades**
- **Heritage Tourism**
- **Inner Coastal Development**
- **Life Sciences and Biotechnology**

In addition to these clusters, NCNE has a strong presence in **Homeland Security** due to the long established relationship with the United States Coast Guard. The Coast Guard location has a major economic impact as a result of enlisted, civilian and contract employees. The location is also a natural magnet for businesses involved in a variety of **Aviation** activities ranging from aircraft maintenance to training programs and support activities like hospitality and retail.

“Green” Industries and **Renewable Energy** are also being recruited or developed in NCNE. The extensive waterfront in NCNE makes environmental issues a major concern in the region. Each of the sixteen counties has a portion of the county border defined by a large body of water or river. Given the sensitivity to the environment in the Northeast Region, the development and facilitation of “green” industries is a natural choice for the NCNE. Renewable Energy is an

excellent example of focusing on complementary objectives represented by the Biotechnology emphasis and environmental responsibility.

The proximity of the Northeast Region to the Virginia Ports in Hampton Roads, Virginia also affords an opportunity to pursue **Transportation, Warehousing and Logistics** as another industry cluster. Import/Export and Retail Goods Distribution are specific sub-categories within the larger sector which are under consideration as potential commodities to move through the Virginia Ports with a cross-docking or distribution center operating in a NCNE location.

Faculty from the College of Technology and Computer Science at East Carolina University investigated four (4) possible sites in North Carolina's Northeast Region (NCNE) for the possible development of a "Logistics Village." The four (4) locations investigated are: **Ahoskie (including Tri-County Airport); Edenton (including Northeastern Regional Airport); Elizabeth City (including Elizabeth City/Coast Guard Air Station Airport) and Williamston (including Martin County Airport).** The Northeast Commission has also participated in recent discussions with the Virginia Port Authority and other potential private investors in Virginia leading to the addition of another potential location which we will call the **"Import/Export Village."** Further negotiations with Virginia representatives and identification of additional infrastructure needs will be critical for the potential development of this location. A brief description of characteristics for each site is provided here as an overview for the potential "Logistics Village" and more detailed descriptions are provided later in this report.

- **Ahoskie (Tri-County Airport)** The Tri-County Airport is so-named because it lies in close proximity to the borders of three different counties – Hertford, Bertie and Northampton. The airport is a general aviation field with a 4000 foot runway. Another asset in the area is the North Carolina Virginia (NCVA) Railroad which provides short line rail service originating in Virginia and spanning across portions of the three counties to serve several industrial firms. The terminal point on the rail route is the Nucor Corporation (steel industry) location near Winton on the Chowan River on the eastern Hertford County border. The roadways in the immediate area are primarily two-lanes which provide adequate access for trucks in several directions across Hertford County. NC Route 11 and the shared route with U.S. 13 provide a North-South route which connects from Suffolk, Virginia all the way to U.S. 64 to the south in Martin County and other points beyond.
- **Edenton (Northeastern Regional Airport)** The Northeastern Regional Airport in Edenton has a 6000 foot runway which is capable of handling many of the current air cargo planes in use. The area around the airport has a number of existing organizations including several marine/boatworks, MiTek and a U.S. National Guard Armory. MiTek utilizes the barge site to receive steel rolls as their raw material for making roof trusses. The barge site is located less than one-half mile from the airport. The Chesapeake & Albemarle is a short line railroad which provides rail connections from the Virginia Ports in the Hampton Roads area to the Edenton area. There is also an inactive rail spur which is approximately three miles from the airport. The active rail line runs in close proximity to U.S. 17 on the northern side of the city. Roadways are two-lanes and provide access to the airport in several directions. The surface roads, route 32 and 37, also provide

multiple ways to connect to U.S. 17 or to U.S. 64. For potential future development, there is 600 acres of land which wraps around the airport which could be acquired.

- **Elizabeth City (Elizabeth City/Coast Guard Air Station Airport)** The Elizabeth City/Coast Guard Air Station (EC/CGAS) Airport is a strategically important U.S. Coast Guard facility for air rescue operations and homeland security on the east coast. The location is ideally situated to provide air rescue operations for all of North Carolina's waterways in the eastern part of the state including covering the waterfronts along the Outer Banks, the entire North Carolina coast and serving other nearby states when needed. Air access is clearly the first priority for the Coast Guard but suitable access is also available via ground transportation and via waterway. U.S. 17 and 17 Bypass provide excellent highway access to the Elizabeth City area. Barge service is available to deliver bulk materials for certain industries and is situated at a separate location from the airport to the north of the city. The Chesapeake & Albemarle is a short line railroad which provides rail connections from the Virginia Ports in the Hampton Roads area to the Elizabeth City area. There is also an inactive rail spur which passes less than one-half mile from the airport. The active rail line lies in close proximity to U.S. 17 Bypass which makes properties along that corridor attractive as separate sites away from the airport.
- **Williamston (Martin County Airport)** The Williamston site is located in Martin County in the Northeast Region of North Carolina. The main transportation assets include a major portion of U.S. 64 and segments of U.S. 17 and NC 11/U.S. 13. CSX Railroad also provides rail service traveling East-West across the region from Plymouth in Washington County, across the Martin County and continuing on to connect with Rocky Mount in Nash County. Martin County Airport is located about 15 miles west of Williamston and in close proximity to the town of Everetts to provide General Aviation service. The airport has a runway which is 5000 feet in length. There is an industrial park (Martin Business Park) in close proximity to the airport which also has a rail siding for CSX rail and easy access to U.S. 64. This location provides excellent access to move items via U.S. 64 to connect with Interstate 95 which is approximately 40 miles to the west.
- **Import/Export "Megasite" Village** The Northeast Commission has discussed a number of "out-of-the-box" proposals as potential development opportunities to forge a stronger relationship with the Hampton Roads area and the Virginia Ports. According to Vann Rogerson, President and CEO of the Northeast Commission, recent discussions have focused on two different sites along the Chesapeake & Albemarle (C&A) short line rail in the Northeast Region:
  - Pasquotank County – this site was previously marketed under the name "Tanglewood" and has now been purchased by Jim Justice from Greenbrier, West Virginia. The site contains a total of more than 5,000 acres but the parcel that was sold to Mr. Justice is approximately 3,900 acres. The site affords good access to U.S. 17 Bypass, the C&A short line railroad and other infrastructure. This location is less than 50 miles from the Virginia Ports.

- Mr. Justice purchased the Greenbrier Resort in West Virginia in 2009 and owns another resort area as well. He also has major investments in agricultural operations in several Southeastern and Mid-Atlantic states.
- Perquimans/Chowan County Border – this site also lies along the C&A rail line and also is located in close proximity to U.S. 17. This location would be more centrally located within the Northeast Region and is about 60 to 65 miles from the Virginia Ports.

This final discussion about a “mega-site” village offers several unique opportunities. First and foremost, there is an opportunity for the Northeast Region to partner with the Port of Virginia and other constituencies in the Hampton Roads region. A second opportunity exists to utilize a “virtual logistics village” approach and to include several locations across several counties along the C&A short line railroad and U.S. 17. A third opportunity exists to develop a plan with Rail America, NC DOT, the Northeast Partnership, local companies and the Port of Virginia participating as team members. Utilizing any of these proposed approaches will lead to a broader economic impact over a larger area within the Northeast and should also help to develop a more robust logistics village concept.

### **BARGE Shipments**

Somewhat unique to the Northeast Region is the number of barge shipments from and to the region. The majority of the material shipped through the port at Morehead City is phosphate which originates in the Northeast Region at the PCS Phosphate mining operation in Aurora. PCS Phosphate operates their own fleet of barges and ships the phosphate into Morehead City by barge from Aurora. Those barge shipments are then consolidated into larger vessels and also distributed by other modes including rail and truck.

In addition to the phosphate shipments, there is a steady volume of barge shipments for scrap steel and other processed steel material moving into the Northeast Region for further manufacturing procedures. Scrap steel is shipped by barge to Nucor Steel located in Cofield, NC and Winton, NC. An estimated 60,000 tons of scrap steel are delivered every month by two different companies providing barge services for Nucor via water access across the Albemarle Sound and up through the Chowan River to Nucor’s location in Hertford County.

Rolled steel is being delivered by barge in Edenton for further fabrication into roof trusses by the company known as MiTek. The steel rolls are produced by Nucor in one of their South Carolina facilities and then shipped out of Mt. Pleasant/Charleston by barge all the way to Edenton.

These are the prominent examples of barge shipments but many others are also occurring in the Northeast Region. Rock or gravel for the concrete industry is another item shipped by barge. Other materials shipped by barge include rock, sand and other materials for reef and beach restoration.

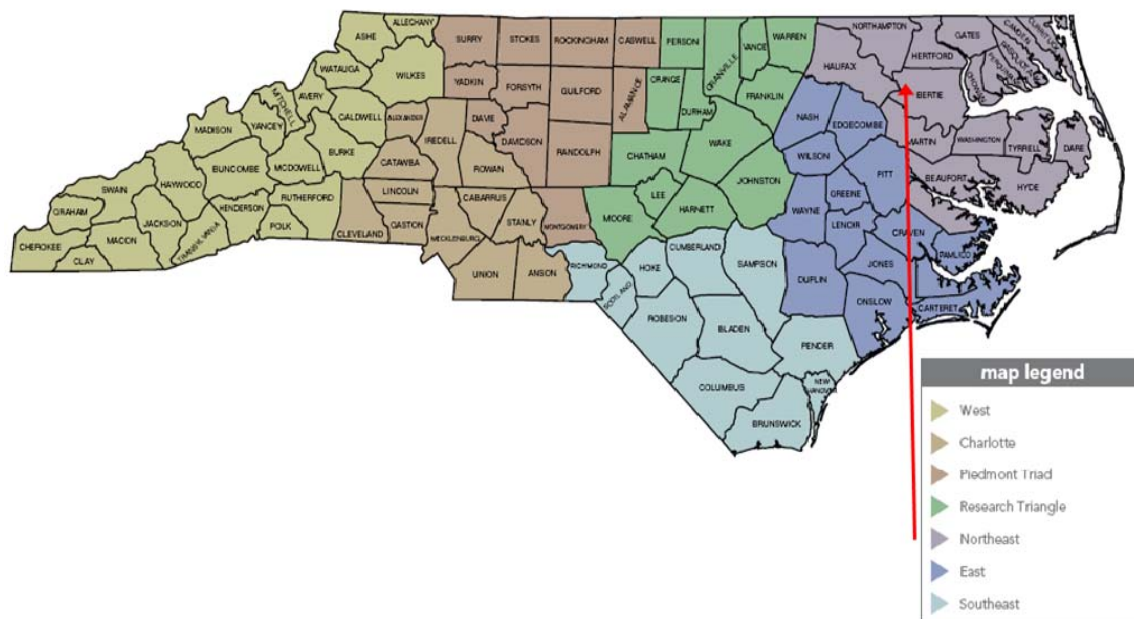
In short, barge shipments play an important role in commercial/industrial operations in the Northeast Region.

# 1 Introduction

This section introduces the Northeast economic development region of North Carolina. The region has a land area of 9,394 square miles which is roughly the size of the Commonwealth of Massachusetts. The Northeast Region has thirteen (13) airports with all being General Aviation facilities. The following section will provide additional details to describe the characteristics of the Northeast Region.

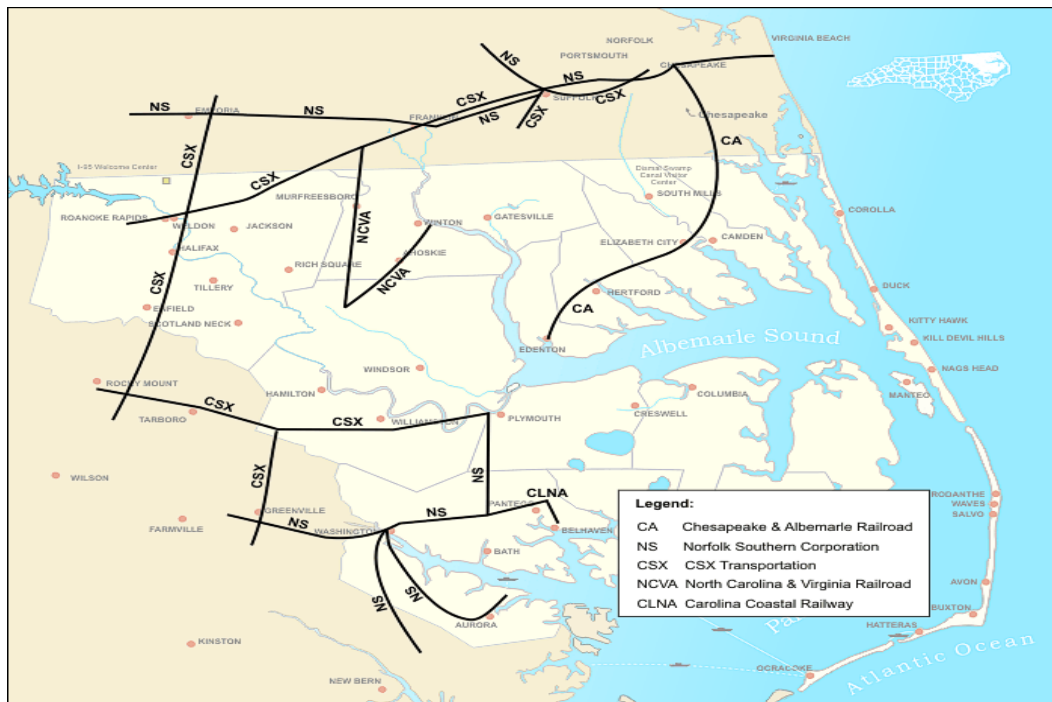
## 1.1 Overview of the Region

The Northeast Region of North Carolina includes sixteen (16) counties with the region's borders defined by the Atlantic Ocean to the east, the Commonwealth of Virginia to the north, North Carolina's Eastern Region to the south, and North Carolina's Triangle Region to the west (see Figure 1-1: Northeast Regional Map). The Northeast has a rich history which includes the first manned aircraft flight at Kill Devil Hills near Kitty Hawk. The Roanoke Colony on Roanoke Island is historically important and is believed to be the first site where British colonists landed in the New World. The U.S. Coast Guard has been associated with the Northeast Region for more than 50 years in Elizabeth City.



**Figure 1-1: Northeast Regional Map**

As an overview of the current transportation infrastructure this section discusses the existing rail and roadway assets. Rail service includes CSX and Norfolk Southern from the south and west of the region including Aurora and Morehead City connections. Short line rail service connects from the north originating in Virginia via Chesapeake & Albemarle (C&A) and North Carolina & Virginia (NCVA) which are actually part of the same rail company, Railtex. Rail routes are shown in a regional map (See Figure 1-2: Northeast Regional Railroad Map).



**Figure 1-2: Northeast Regional Railroad Map** (Source: <http://www.ncnortheast.info/>)

Several major roadways make up the essential ground transportation assets for the region. U.S. 17, U.S. 64, U.S. 158, U.S. 13 and U.S. 264 are major highways with some segments at the same level as interstate-quality roadways. Other segments still need improvement or need to be completed. Interstate 95 cuts across the western edge of the region and connects Northampton and Halifax counties with Virginia to the north and NC's East Region to the south. In addition to the U.S. highways a number of state roadways also play an important role in ground transportation for the region. N.C. 11 shares a long stretch with U.S. 13 (not shown in map) and is one of the important North-South routes connecting the Northeast Region with Virginia. Many of the major roadways are shown in a regional map (See Figure 1-3: Northeast Regional Roadway Map).



**Figure 1-3: Northeast Regional Roadway Map** (Source: <http://www.ncnortheast.info/>)

Approximately 362,000 people reside in the Northeast Region with recent growth of 1.1 percent (See Table 4: Population Trends by County). The population has remained stable in some counties while declining slightly in other counties. As the Hampton Roads area in Virginia becomes more developed and congested, there is a potential for residential development to spill over into the Northeast Region leading to an increase in the population trend. The workforce population in the region is slightly more than 150,000 and includes a wide range of industry sectors including healthcare, education, manufacturing, government, agriculture, wood products, transportation and distribution, and construction. The projection for the 2014 workforce estimates that 179,000 residents will be employable. Some of the current major private employers include Nucor Steel, Perdue Poultry Processors, Lowes Distribution Center, Domtar paper, PCS Phosphate, U.S. Coast Guard, Wal-Mart Stores, Inc., and Food Lion, Inc.



Utility service is available from a long list of providers with each provider focusing on service in different specific counties and towns including:

- Dominion NC Power
- Albemarle Electric Membership Corporation
- Halifax Electric Membership Corporation
- Roanoke Electric Cooperative
- Tideland Electric Membership Corporation
- Electricities
- Edgecombe-Martin Electric Membership Corporation
- Progress Energy

Some of the individual towns also have municipally owned utilities. Edenton is one example of municipal ownership.

There are numerous campuses for the NC Community College System to serve business, industry and residents in the region. One public university, Elizabeth City State University and two private colleges support the Northeast Region's educational and outreach needs. The rural environment contributes to the quality of life for people choosing the Northeast region for their place of residence and employment. Other attractive regional characteristics include numerous waterfronts, historical attractions and outdoor activities for residents to enjoy. For 2010, twelve (12) of the sixteen (16) counties were designated as Tier 1 status. The most recent rating for 2011, has eleven (11) of the sixteen (16) counties listed as Tier 1 counties. Tier 1 counties are eligible for the highest level of incentives through the state's various economic development incentives and support programs (2011 County Tier Designations. December 3, 2010).

## 1.2 *Northeast Partnership*

North Carolina's Northeast is a region in the midst of what the Northeast Commission calls a "transformation." Described as the "poorest region" with demographics that are "challenging," the region's future economic success will depend on "cluster area development." Four areas of development exemplify the Northeast's vision.

- **Aviation.** With a U.S. Coast Guard air base and three commercial airports, the Commission is looking to enhance training programs in conjunction with the city/state university at Elizabeth City [and the College of Albemarle]. There is land available but there needs to be a skilled work force to improve economic viability.
- **Automotive research.** With proximity to I-95 and its mid-Atlantic location, the region's plans are to be an automotive technology and research center of excellence.
- **Biomass fuels and processing center.** With adequate rural acreage, the region looks ahead to being a "cellulosic-based" research center; such research would develop a class of biofuels that would be less prone to increase the prices of staple foods, as we are seeing during the current ethanol boom.
- **Residential growth and increased tourism.** As undeveloped land becomes less available, the Northeast is viewing its geography and physical attractions as a key to future economic prosperity. Key is the proximity to the Hampton Roads/Tidewater area. However, the region must plan ahead to avoid the congestion from ill-planned development in order to preserve a highly attractive quality of life.

Transportation infrastructure needs are highlighted by connections to major highway networks and corridors into Southeast Virginia as well as the Outer Banks. Another asset, the existing short line railroad lines, could be improved and utilized to a greater extent to help attract companies/industries seeking deliveries via rail connection to the Virginia Ports in Hampton Roads.

In 2004, the Northeast Commission announced the development of one Strategic Plan for the Northeast Region. As part of that strategic plan the following industrial clusters were selected to be emphasized:

- **Aviation**
- **Tourism/Leisure/Entertainment**
- **Biotechnology/Life Sciences**
- **Agricultural Products Development**
- **Automotive and Automotive Suppliers**
- **Boatbuilding**
- **Inner Coast Development**

In 2011, the current industry clusters which are the focus of the Northeast Commission's efforts are:

- **Automotive**

- **Aviation**
- **Boatbuilding/Marine Trades**
- **Heritage Tourism**
- **Inner Coastal Development**
- **Life Sciences and Biotechnology**

Over a period of seven years, there have been only minor changes. **Agricultural Products Development** is no longer listed and is presumed to be included in the **Life Sciences and Biotechnology** cluster. **Tourism** has been modified to **Heritage Tourism** and **Leisure/Entertainment** has been dropped from the listing.

This is evidence of an enduring vision and a sustained commitment to the strategy to pursue economic development in those industry clusters. The industry cluster choices have been rationalized and represent the strengths of the Northeast Region very well.

Based on recent discussions with several economic development personnel and based on recent activities in the region, we would conclude that the top four clusters (or potential clusters) are now:

- **Life Sciences and Biotechnology (including Agri-Business and Wood Products),**
- **Aviation,**
- **Renewable Energy, and**
- **Boatbuilding/Marine Trades**

It is notable that the first two clusters are closely associated with Research and Development activity in those respective fields. **Renewable Energy** has not been articulated in previous strategies but has emerged in recent discussions and recent activities. In part, Renewable Energy is embedded within the Biotechnology cluster but should be stated explicitly to recognize other possibilities such as wind energy. In the following sections the discussion of recent events and specific locations will provide more details about the emphasis on these industry clusters.

Another main focus for Northeast NC is to strengthen the ties between the region and the **Port of Virginia**. The close proximity and some good existing infrastructure represent location advantages which need to be elevated and leveraged to a greater extent. Later sections of this report will suggest some of the potential ways that the Northeast Region can establish a stronger working relationship with the Hampton Roads area and the Port of Virginia specifically.

### 1.3 **Regional Data**

This section summarizes important information of key workforce and economic development data. Table 1-1 explores the mobility of the regional work force by county and indicates that over the ten years between 2000 and 1990 census information, every county increased the travel time related to employment. Numbers ranged from 35% in Chowan to 6% in Currituck. In general, we interpret this to mean that more of the regional workforce finds employment outside

the region. According to the Northeast Commission, approximately 24,000 residents of the Northeast Region travel to jobs outside the region. Of those, approximately 12,000 residents travel to jobs located in Virginia. For the counties that border Virginia and lie close to Hampton Roads such as Currituck, Camden, and Gates, the percentage of residents traveling to Virginia for employment is likely to be a higher number. There are also a significant number of Virginia residents who currently travel to Northeast NC for their jobs.

**Table 1-1: Worker Travel Time**

Worker Travel Time for The Region			
County	1990 Average Workers Travel Time (minutes)	2000 Average Workers Travel Time (minutes)	% Change from 1900-2000
Beaufort	21	25	19%
Bertie	23	29	26%
Camden	29	32	10%
Chowan	20	27	35%
Currituck	33	35	6%
Dare	19	20	5%
Gates	33	38	15%
Halifax	19	24	26%
Hertford	20	25	25%
Hyde	20	22	10%
Martin	19	24	26%
Northampton	21	27	29%
Pasquotank	20	23	15%
Perquimans	27	33	22%
Tyrrell	28	33	18%
Washington	21	28	33%

Table 1-2 and Table 1-3 provide an overview of industry sector employment and wages from 2009 to first quarter of 2010. In general the economic downturn is evident in Table 1-2 in both establishments (14 of 24 with negative change), employment (15 of 24 with negative change), and wages (15 of 24 with negative change). Overall, “all industries” showed a significant employment drop along with reductions in establishments and wages. Government employment grew but wages fell. Health care and social services was the largest sector with positive growth in employment numbers but wages in this sector fell nearly 10%.

Table 1-3 provides absolute employment numbers and shows that the largest sector in the region is private industry and that retail and manufacturing are the largest segments in that sector.

**Table 1-2: Employment Overview for the Northeast Region**

Industry Category	2009 Establishments	2009 Annual Employment	2009 Average Weekly Wage (\$)	2010 Q1 Establishments	2010 Q1 Employment	2010 Q1 Average Weekly wage	% Change Establishments	% Change Employment	% Change Weekly Wage
Total All Industries	9,582	117,105	572	9,451	110,183	571	-1.39%	-6.28%	-0.18%
Total Government	735	13,779	701	721	15,185	680	-1.94%	9.26%	-3.09%
Total Private Industry	8,876	75,538	534	8,730	72,616	547	-1.67%	-4.02%	2.38%
Agriculture, Forestry & Fishing	421	2,756	534	421	2,409	528	0.00%	-14.40%	-1.14%
Mining	5	0	-	5	0	-	0.00%	0.00%	-
Utilities	30	168	1,108	31	383	1,392	3.23%	56.14%	20.40%
Construction	1,102	4,574	757	1,061	3,914	891	-3.86%	-16.86%	15.04%
Manufacturing	328	11,250	776	328	11,276	823	0.00%	0.23%	5.71%
Whole sale Trade	386	2,497	640	374	2,778	615	-3.21%	10.12%	-4.07%
Retail Trade	1,551	16,018	421	1,546	14,983	409	-0.32%	-6.91%	-2.93%
Transportation/Warehousing	408	2,784	805	400	2,822	737	-2.00%	1.35%	-9.23%
Information	126	793	677	122	789	762	-3.28%	-0.51%	11.15%
Finance and Insurance	415	2,403	797	423	2,397	812	1.89%	-0.25%	1.85%
Real Estate and Rental	411	3,450	433	402	2,456	451	-2.24%	-40.47%	3.99%
Professional and Tech Services	567	1,351	684	576	1,445	649	1.56%	6.51%	-5.39%

Industry Category	2009 Establishments	2009 Annual Employment	2009 Average Weekly Wage (\$)	2010 Q1 Establishments	2010 Q1 Employment	2010 Q1 Average Weekly wage	% Change Establishments	% Change Employment	% Change Weekly Wage
Management of Companies	22	122	516	22	113	453	0.00%	-7.96%	-13.91%
Admin and Waste Services	412	3,124	540	409	2,768	538	-0.73%	-12.86%	-0.37%
Educational Services	231	3,544	615	224	5,659	602	-3.13%	37.37%	-2.16%
Health Care/Social Assistance	815	8,543	563	813	10,701	515	-0.25%	20.17%	-9.32%
Arts, Entertainment and Rec.	156	1,264	378	160	1,004	366	2.50%	-25.90%	-3.28%
Accommodation and Food Services	833	11,451	267	831	9,306	243	-0.24%	-23.05%	-9.88%
Other Services	686	3,255	423	687	3,041	399	0.15%	-7.04%	-6.02%
Public Admin	362	9,804	708	371	9,491	694	2.43%	-3.30%	-2.02%
Unclassified	344	166	660	245	66	960	-40.41%	-151.52%	31.25%

**Table 1-3: Industry Overview for the Region**

2009 Employment	Beaufort	Bertie	Camden	Chowan	Currituck	Dare	Gates	Halifax	Hertford	Hyde	Martin	Northampton	Pasquotank	Perquimans	Tyrrell	Washington
Total All Industries	16,536	7,106	2,178	4,992	5,205	18,391	1,486	17,105	9,628	2,057	8,404	5,542	16,504	1,914	1,103	3,254
Total Government	2,544	919	21	560	49	1,881	528	1,880	534	367	759	398	2,104	348	240	519
Total Private Industry	13,225	3,442	1,280	2,688	3,704	15,016	762	11,907	4,967	1,173	6,681	2,793	10,078	721	502	1,812
Construction	773	296	137	232	318	966	21	551	291	81	367	221	536	114	0	37
Manufacturing	3,043	2372	65	374	53	451	113	1,950	1,030	133	1,687	391	709	30	0	156
Retail Trade	2,118	272	429	499	1004	3,250	149	2,421	1,043	154	1,150	1,121	2,511	200	137	369
Transport/Wareho using	379	168	13	171	298	193	76	543	84	15	42	39	690	25	8	45
Information	175	0	0	61	20	215	0	126	62	0	53	0	125	0	0	0
Finance and Insurance	372	89	20	125	83	455	43	327	155	21	161	0	527	39	14	70
Real Estate and Rental/Leasing	103	21	19	39	446	2,333	4	142	84	65	38	0	144	14	0	9
Professional and Tech Services	11	53	0	119	0	13	46	262	139	9	145	50	582	0	14	53
Admin. and Waste Services	890	97	282	0	288	580	0	230	468	0	136	119	0	59	0	54
Other Services	440	112	92	147	189	564	56	480	305	18	69	128	436	54	97	52
Public Admin	1,220	304	8	123	10	1,691	113	1,738	487	350	717	359	2,010	323	232	496

Table 1-4 provides demographic information on the population of the region by county. With the exception of Dare, Halifax, and Pasquotank, the regional population is primarily rural. Seven of the sixteen counties are considered to be entirely rural. Forecasts of the 2014 population indicate negative population changes in eight of sixteen counties. Notable exceptions are Currituck (14.2%), Camden (18.3%), and Pasquotank (9.1%).

**Table 1-4: Population Trends by County**

County	2000 Urban	2000 Rural	2009 Population	2014 Population	2009- 2014 Change	2009-2014 % change
Beaufort	14,080	30,878	46,524	46,904	380	0.8%
Bertie	0	19,773	19,217	18,861	-356	-1.9%
Camden	0	6,885	10,071	11,915	1,844	18.3%
Chowan	5,421	9,105	14,927	15,327	400	2.7%
Currituck	0	18,190	25,305	28,910	3,605	14.2%
Dare	20,864	9,103	35,508	37,579	2,071	5.8%
Gates	0	10,516	12,209	13,176	967	7.9%
Halifax	24,468	32,902	55,265	53,683	-1,582	-2.9%
Hertford	7,695	14,906	23,752	23,263	-489	-2.1%
Hyde	0	5,826	5,518	5,345	-173	-3.1%
Martin	5,735	19,858	23,993	23,159	-834	-3.5%
Northampton	2,164	19,922	21,540	21,019	-521	-2.4%
Pasquotank	19,162	15,735	41,991	45,804	3,813	9.1%
Perquimans	0	11,368	12,842	13,676	834	6.5%
Tyrrell	0	4,149	4,227	4,168	-59	-1.4%
Washington	4,729	8,994	12,954	12,460	-494	-3.8%

Table 1-5 presents regional labor statistics. Eleven of sixteen counties are designated as tier one and the remainder are tier 2. November 2010 unemployment was over 11% in Halifax, Northampton, and Washington. Gates, Dare, Hyde, and Currituck were the lowest with unemployment below 7%.



**Table 1-5: Regional Labor Statistics**

County	2011 County Tier Designation	November 2010 Unemployment Rates
Beaufort	1	10.1%
Bertie	1	10.3%
Camden	1	6.5%
Chowan	2	9.4%
Currituck	2	4.1%
Dare	2	6.5%
Gates	1	6.8%
Halifax	1	11.3%
Hertford	1	9.4%
Hyde	1	6.2%
Martin	1	9.6%
Northampton	1	11.5%
Pasquotank	2	8.9%
Perquimans	2	8.1%
Tyrrell	1	8.4%
Washington	1	11.0%

#### 1.4 ***Regional Data for Hampton Roads in Virginia***

Given the proximity of the Northeast Region to the state border it is also important that we consider the Commonwealth of Virginia. The Port of Virginia in Hampton Roads is a major resource that impacts a very broad segment of the region in general. According to Port statistics, the economic reach contributes 343,000 jobs to the overall region (Source: Port of Virginia By the Numbers, <http://portofvirginia.com/>). The deep water port has a channel depth of 50 feet and has the authorization already in place to dredge to a depth of 55 feet. The Port of Virginia complex has four different port locations and is the second busiest port on the east coast behind New York/New Jersey (based on total volume of all types of shipments). According to Port of Virginia statistics, 66 percent of the shipments moved by truck, 30 percent of the shipments moved by rail and the remaining 4 percent of the shipments moved by barge in 2009 going in and out of the Port (Virginia Port Stats: <http://www.virginiaportauthority.com>). It is important to note that “Barge” shipments can travel from Norfolk all the way to South Mills and Elizabeth City utilizing the Intracoastal Waterway.

The Hampton Roads economic development agencies publish a list of the top manufacturing employers each year. This list provides another avenue for Northeast NC to look for opportunities to partner with Virginia. For 2010, the list contains 126 companies with more than fifty (50) employees. Table 1-6 lists the Top Thirty (30) companies for number of employees in the Hampton Roads region. The Top Thirty (30) were selected because each of the companies employs more than 300 workers with some having a very large workforce.

In addition to the port, the military presence (not shown in the Table) and the shipbuilding industry are the other major characteristics that define Norfolk, Newport News and the surrounding cities that make up Hampton Roads. The Shipbuilding and Repair industry is a clear leader for civilian employment with more than 31,000 workers concentrated in eight (8) major employers. Northrup Grumman leads the way in the industry with a total of 19,000 employees at their huge complex in Newport News. The Naval Shipyard is another major employer also in Shipbuilding and Repair with 7,500 workers in Portsmouth. These company examples share a common thread with the Boatbuilding/Marine Trades industry in NCNE.

The Top Thirty (30) manufacturing employers account for 55,000 jobs in the Hampton Roads region. Evaluating just those Top Thirty (30) employers, the Food Products sector is in second place with more than 9,000 workers, Automotive follows with nearly 3,000 workers and Aviation/Aerospace is represented by a few large employers with a total of 1,300 workers.

From the Food Products sector, three companies have a total of 7,600 employees in Meat Processing – Smithfield Foods (of Virginia), and Gwaltney of Smithfield, Inc. at two different locations, Smithfield and Portsmouth. One seafood processing company accounts for more than 800 employees. Another interesting observation about the Food Products sector is the number of employees working with coffee and tea products. Two companies, Unilever/Lipton Tea and Massimo Zanetti Beverage USA, combine for 685 employees working with coffee and tea. A third company, Sara Lee Coffee & Tea, adds another 100 employees to this industry sector

producing coffee and tea products for packaging and distribution in Suffolk and Portsmouth. Proximity to the port for imported coffee beans and imported tea is apparently an important factor for these businesses. [NOTE: These are not like Starbucks coffee shops; they are factories and distribution facilities].

Similar industrial interests in North Carolina and more specifically in the Northeast Region could translate to supplier-buyer relationships with the major employers in Hampton Roads. Some relationships exist already but the potential to expand those relationships is and should continue to be another area of focus for Northeast Region development. Smaller operations of 10 to 50 employees are often needed for tooling and small components for automotive, aerospace and even shipbuilding. The Food Products sector also affords an excellent opportunity for spillover relationships with existing Virginia enterprises or developments in NCNE which are based on emulating the ones in Virginia.

There are three main ways that a logistics village in the Northeast Region could benefit from relationships with these companies in Virginia:

1. By providing logistics and distribution services for the products produced in Virginia,
2. By providing manufacturing locations and logistics services for suppliers to the companies in Virginia, and
3. By providing warehousing and distribution for raw materials and maintenance, repair and operating (MRO) supplies needed to support operations in Virginia.

	NAICS Code	Company Name	Product/Service Description	Number of Employees	City
1	336	Northrop Grumman Shipbuilding	Shipbuilding & repair	19,000	Newport News
2	336	Norfolk Naval Shipyard (Government Facility)	Shipbuilding & repair	7,500	Portsmouth
3	311	Smithfield Foods, Inc	Meat processing & packing	5,000	Smithfield, VA
4	334	Measurement Specialties, Inc. (Schaevitz Sensors)	Sensor systems; measuring & controlling devices	2,428	Hampton
5	334	TRW Automotive Systems (Measurement Specialties, Inc.)	Pressure transducers/transmitters; pressure & fluid sensors	2,426	Hampton
6	333	Canon Virginia, Inc.	Photocopiers; laser jet printers	2,235	Newport News
7	336	BAE Systems Norfolk Ship Repair, Inc. (Norshipco)	Shipbuilding & Repair	2,200	Norfolk
8	311	Gwaltney of Smithfield, Inc.	Meat processing & packing	2,100	Smithfield, VA
9	333	STIHL, Inc.	Chains saws & outdoor power equipment; power drive tools	2,016	Virginia Beach
10	311	Icelandic USA, Inc. (Iceland Seafood)	Frozen seafood products	900	Newport News
11	312	Anheuser-Busch, Inc. / InBev	Brewery, beer products & malt beverages	870	Williamsburg
12	336	Continental AG Newport News (Siemens VDO)	Motor vehicle parts; fluid power equipment	818	Newport News
13	331	Alcoa-Howmet Hampton	Aerospace structural components; cast turbine airfoils	810	Hampton
14	336	Earl Industries LLC	Shipbuilding & repair	615	Portsmouth
15	339	AVID Medical, Inc.	Disposable surgical supplies / procedure trays	600	Toano
16	339	CooperVision Eyecare, Inc. (dba Biocompatibles Eyecare)	Contact lenses; vision correction devices	570	Norfolk
17	311	Gwaltney of Smithfield, Inc.	Meat processing & packing	500	Portsmouth
18	334	Raytheon Technical Services Company (NSA NW Annex)	Search & navigation equipment; aircraft parts	500	Chesapeake

19	333	Liebherr Mining Equipment Co. (Liebherr-America, Inc.)	Heavy equipment (excavators, dozers, loaders)	450	Newport News
20	336	SPEEDE Shipyard – Metro Machine Corporation	Shipbuilding & Repair	400	Norfolk
21	339	General Foam Plastics Corporation	Christmas trees & wreaths; plastic coolers; ice chests	400	Norfolk
22	311	Unilever/Thomas J. Lipton, Inc.	Blended tea	385	Suffolk
23	336	Tecnico Corporation	Shipbuilding & repair	375	Chesapeake
24	313	Narricot Industries LLC	Narrow fabric mill; automotive seat belt webbing	372	Boykins
25	333	Sumitomo Machinery Corporation of America	Industrial gears & speed reducers	371	Chesapeake
26	336	AMSEC LLC/SAIC	Naval architecture & marine engineering; shipbuilding & repair	350	Virginia Beach
27	327	The Glass Baron, Inc.	Hand-blown glass giftware & decorative items	330	Virginia Beach
28	311	Massimo Zanetti Beverage USA	Liquid coffee; roasted coffee	300	Portsmouth
29	325	Industrial Resource Technologies, Inc. (Canon, Inc.)	Printer cartridge recycling facility	300	Gloucester
30	325	BASF Corporation (CIBA Specialty Chemicals)	Polyacrylamides for water treatment applications	300	Suffolk

**Table 1-6: 2010 Manufacturing Companies in Hampton Roads (50+ employees and NAICS 3xx codes)**

Source: <http://www.hreda.com>

## 2 Potential Logistics Villages

This section will provide more details about four original alternatives for logistics village sites in the Northeast Region – Ahoskie, Edenton, Elizabeth City and Williamston. A fifth location has been added as a result of very recent discussions between the Northeast Commission, North Carolina Department of Commerce, North Carolina Department of Transportation and the Virginia Ports Authority.

### 2.1 *Logistics Village 1 – Ahoskie Area*

Ahoskie is located in Hertford County which shares borders with Northampton, Bertie, Gates and a portion of Chowan as the neighboring North Carolina counties. To the north, Suffolk County, Virginia shares a border with Hertford County. According to the county profile, an address in Hertford County places a business within a day's drive of over 50 percent of the country's population. The county is also within a few hours of the North Carolina ports of Wilmington and Morehead City, and within an hour of the international Port of Hampton Roads in Virginia. The transportation infrastructure in the county includes three U.S. primary routes and five state routes. The county's roadways provide access to the outlying infrastructure of Interstate 95 which is 43 miles to the west and Interstate 64 which is 40 miles to the north in Virginia. U.S. 158 traverses the county in the northern area and state route N.C. 11 and U.S. 13 provide access traveling from north to south to U.S. 64. U.S. 258, N.C. Route 45 and N.C. Route 42 are other important roadways for the county's transportation infrastructure.

There are thirteen Motor Freight Carriers with Terminals located within 70 miles of Hertford County. These companies include:

- Builders Transport
- Carolina Freight Carriers
- Consolidated Freightways
- Estes Express Lines
- Overnight
- Thurston Motor Lines
- Wilson Trucking
- Yellow Freight System
- Bulldog
- J.B. Hunt
- National Freight
- Snyder
- Southeastern Freightlines

A steady volume of truck traffic can be found on many of the roadways throughout the county, but traffic moves along without congestion.

Rail service is provided by the North Carolina & Virginia Railroad (Rail America). The rail line traverses the county starting from the southwest corner then across the entire county ending at a

location near Winton on the Chowan River to serve the Nucor Steel facility. The rail passes through the towns of Aulander and Ahoskie as it crosses the county. The railroad also has an office located in the Town of Ahoskie.

Air express service is available through Federal Express and United Parcel Service. The terminals for these two services are located in Greenville in Pitt County approximately 40 to 50 miles to the south. Federal Express air service travels by truck from Greenville to Raleigh and then by air from Raleigh-Durham (RDU) Airport.

Tri-County Airport (ASJ) provides general aviation air service and is located in the southwestern corner of Hertford County. The airport is approximately 10 to 12 miles from the town of Ahoskie. For regularly scheduled commercial air service, residents can travel to any one of three nearby airports within a one to two hour drive. Pitt-Greenville (PGV) Airport is located to the south, Norfolk International Airport to the north in Virginia, and Raleigh-Durham (RDU) Airport is located to the west.

The towns of Ahoskie and Murfreesboro offer the best infrastructure in the area with utilities, water and sewer to accommodate additional development. North Carolina Power and Roanoke Electric Membership Corporation provide electrical service. There are four fuel oil dealers, six dealers for liquid propane (LP) gas and one dealer for coal in the area. Natural gas service is available from North Carolina Natural Gas.

For water and sewer, Ahoskie has 1,900,000 gallons per day (GPD) as a maximum daily capacity for the water supply and 901,000 GPD capacity for sewer. The Town of Murfreesboro has 2,190,000 GPD as the maximum daily capacity for water supply and can handle 649,610 GPD for the sewer capacity.

Roanoke-Chowan Community College (RCCC) is located in Ahoskie. RCCC offers a selection of associate degree programs and also works with local industry to provide custom designed training programs. The Small Business Center at RCCC is another resource which provides assistance to small business entrepreneurs. Shaw University Cape Center provides another educational resource in Ahoskie.

Chowan University is located in Murfreesboro. The private university offers programs in arts and humanities, business, computer programming, criminal justice, fine arts, liberal arts, and the sciences and mathematics.

Roanoke Chowan Hospital is available for healthcare needs. The hospital has 124 beds, the county has 64 physicians and four medical clinics. Nine dentists are also located in the county.

The rural setting, three rivers and vast amounts of farmland are defining characteristics of Hertford County. Fishing, hunting, outdoor recreation, various festivals and cultural events including a symphony contribute to an excellent quality of life.

**Figure 2-1: Aerial View of Logistics Village 1 Ahoskie Site**

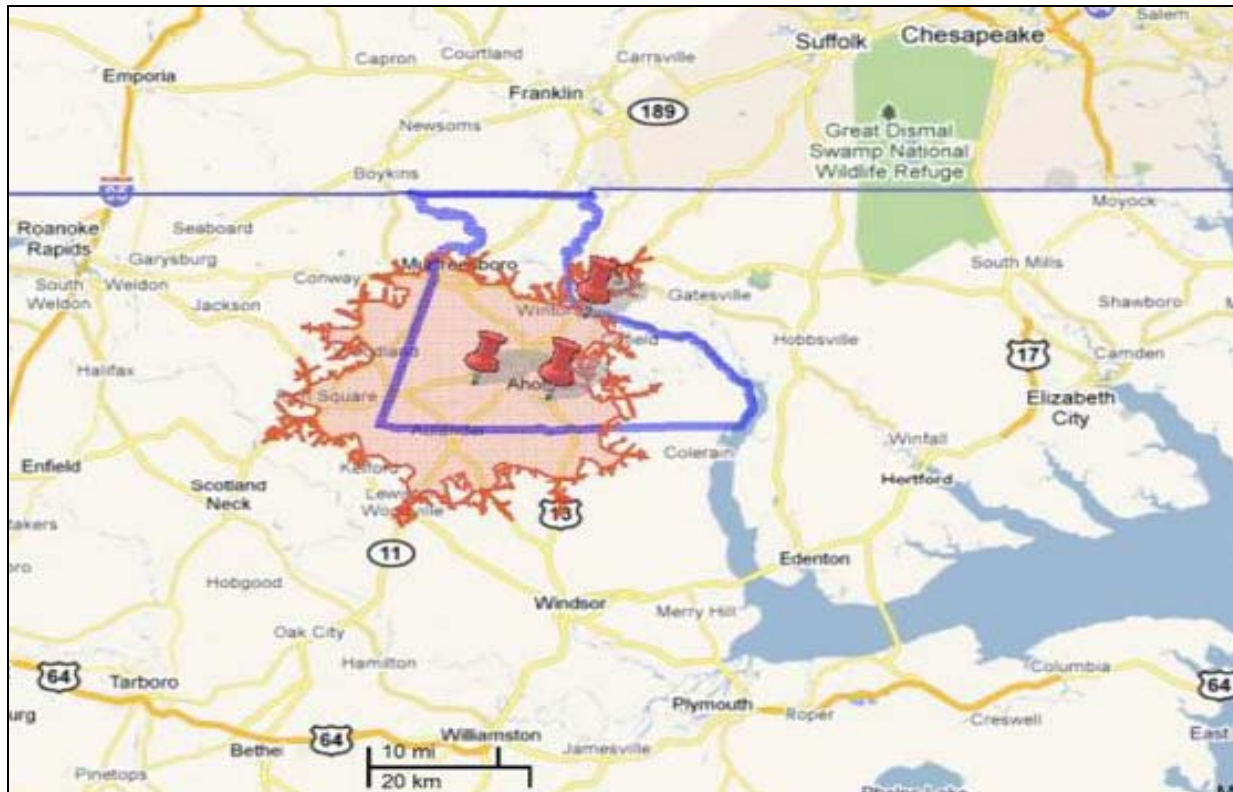
(Source: GoogleEarth, Inc.)



The aerial view shows the Ahoskie region and much of Hertford County including Murfreesboro to the north. U.S. 158 and 258 can be seen across the top of the map and in the Murfreesboro area. NC 11 and U.S. 13 can be seen prominently through the center of the map heading North to South. Winton is also shown located near the Chowan River on the map. The green patches and the lighter colors of plowed fields are indicative of the vast amount of farmland and undeveloped wooded land in the county.



Figure 2-2: Logistics Village 1 Ahoskie Site 30-Minute Drive Time



Ahoskie; 2 bldgs. available (1 is 150,000 s.f. warehouse); 30 Minute Drive Time Area

©2011 Google, ©2011 North Carolina Department of Commerce

A search for “Available buildings” in EDIS found two buildings as noted below the map. One of the two buildings has 150,000 square feet of warehouse space.

For properties available in the area, Hertford County has two “megasites” listed with *Site Selection* magazine in the January 2011 issue. Aulander, which is one of the rail locations, has a property known as “Hearts Delight site” with 1,900 acres available. The Hertford County GIPH location in Winton is listed on the Hertford County Economic Development website as well as being listed with *Site Selection* magazine. The GIPH location has a total of 1,700 acres and is zoned heavy industrial with all utilities in place.

## 2.2 ***Logistics Village 2 – Edenton Area***

Edenton is located in Chowan County in the Northeast Region of North Carolina. The county is bordered by water on three sides with the Chowan River on the western border and the Albemarle Sound wrapping around the southern border and the eastern border. The county has good access to U.S. 17 with four lanes to travel north or south from the Edenton area. The Virginia Ports in Hampton Roads are accessible via highway on U.S. 17 and by rail service by Chesapeake & Albemarle Railroad. Barge service is also available and in use for large shipments of specific raw materials for manufacturing. Agribusiness, manufacturing, and healthcare each play an important role in the Chowan County area.

The Logistics Village in the Edenton Area has been analyzed with the Northeastern Regional Airport as a focal point. The airport has several unique qualities including:

- Runway that is 6000 feet in length (with stopways for possible extension if needed).
- 18 Inch concrete runway which is “weight capable” for most air cargo planes including DC 9’s, 727’s and 737’s.
- Planned upgrade to ILS, Category I in 2011.
- Adjacent industrial park with existing businesses and other development sites available on a total of 600 acres surrounding the airport.
- Multiple routes to enter/exit the airport.
- Centrally located to reach several neighboring counties including Washington, Tyrrell, Martin, Bertie, Hertford, Gates, and Perquimans.
- Centrally located within the Northeast Region – approximately 90 percent of the region is within a 60 mile radius.
- Water access nearby including Barge service less than ½ mile from the Airport. The Barge site can be seen at the bottom center of the Google Earth photo/map in Figure 2-3.

**Figure 2-3: Aerial View of Logistics Village 2 Edenton Site**

(Source: GoogleEarth, Inc.)



From Figure 2-3, significant amounts of undeveloped land can be seen on the northwest, southwest, east and northeast sides of the airport. Locations which are directly north and directly south in line with the runway are on the flight path and not appropriate for development. The Barge Site serving the Edenton area can be seen at the bottom of the photograph.

**Figure 2-4: Logistics Village 2 Edenton Site 30-Minute Drive Time**

(Source: GoogleEarth, Inc.)



Edenton Site, 2 Available Bldgs., with 30 Minute Drive Time Area

©2011 Google, ©2011 North Carolina Department of Commerce

In the immediate area of Edenton a number of Boatbuilding/Marine Trades organizations have existing facilities. Water access is the major factor for these companies. Waterfronts also provide an excellent resource for recreation such as boating and fishing. Edenton has a strong Tourism element with many historic home sites and a distinct historical downtown area in Edenton.

Edenton is centrally located to access many other areas in the Northeast Region. In particular, the biotechnology developments in Washington and Bertie counties are nearby. The wood and paper operations in Martin and Washington counties are also in close proximity. The general area of Edenton has excellent highway access to US 17 and US 64 is easily accessible a short distance to the south. The airport is very capable of handling aircraft of the typical 727 or 737 classes for air cargo.



### 2.3 **Logistics Village 3 – Elizabeth City Area**

Elizabeth City is located in Pasquotank County in the Northeast Region of North Carolina. Pasquotank County is located in close proximity to the North Carolina-Virginia state line and is a short drive to many locations in Hampton Roads including Chesapeake, Portsmouth, Norfolk, Virginia Beach and Newport News. U.S. 17 Bypass is an excellent highway transportation resource on the northwest side of the city. U.S. 17 is a four-lane divided highway through Pasquotank and Camden counties to reach the North Carolina-Virginia border. A five mile segment of U.S. 17 in Virginia remains two-lane due to the “steel” bridge in the Chesapeake area. This creates a traffic bottleneck on the Virginia side of the border for U.S. 17 which then returns to four lanes as U.S. 17 reaches the network of Interstate 64 related roadways on the north side of Chesapeake (including 464, 664, and 264). The Elizabeth City/Coast Guard Air Station (EC/CGAS) airport is located a few miles southeast of downtown Elizabeth City. EC/CGAS is the home to the U.S. Coast Guard’s Search and Rescue Unit. Pasquotank County has an extensive waterfront as a result of borders defined by the Pasquotank River, the Albemarle Sound and the Perquimans River.

**Figure 2-5: Aerial View of Logistics Village 3 Elizabeth City Site**

(Source:GoogleEarth,Inc.)



In Elizabeth City, a significant investment has been made and numerous plans have been prepared for the Elizabeth City Aviation Research & Development Commerce Park (ECARDCP). Investment has been made in water, sewer and utilities and another investment of \$4 million to build a taxiway from the main runway to cut across Consolidated Road to the Phase I properties for the ECARDCP. The taxiway is rated to handle C-130 class aircraft. The taxiway also includes a gated system which functions much like a railroad crossing to close Consolidated Road to traffic and open gates to permit aircraft to cross the roadway on the taxiway. \$12 million has been invested in infrastructure and another \$18 million is estimated as the required amount to construct education and training facilities for Elizabeth City State University and College of Albemarle on approximately 15 acres of the Phase I site.

The development of the Aviation Research and Development Commerce Park (ARDCP) was launched in 2008 with the groundbreaking for the park. Current occupants include DRS Technologies and Telephonics. Tamsco built the first hangar and the company was acquired by DRS Technologies (the name may also be listed as DRS C3 & Aviation Group). Telephonics is a new resident at ARDCP having opened their facility in the Summer of 2010. TCOM is a nearby company which is approximately 1 ½ to 2 miles south of the airport. TCOM produces moorings, dirigibles (or blimps) and aerostats with many of their products being used for military applications.



Photo of Blimp at TCOM Hangar in Elizabeth City, NC (source: AEDC website [http://discoverec.com/why\\_ec/photogallery.php](http://discoverec.com/why_ec/photogallery.php))

The logistics village at ECG will focus primarily on Aviation/Aerospace and is also being marketed by the Department of Commerce for Military Aircraft and Defense Industry manufacturing as a logical extension.

DRS currently occupies two 80,000 s.f. hangars which can hold four C-130s at one time. The first hangar has been in service since 2005 and the second hangar was completed in 2009. The two hangars are connected by a 10,000 s.f. machine shop which was also completed in 2009. DRS has been performing overhauls on Coast Guard C-130s at this location since 2005. The company has recently added Coast Guard CASA and Falcon Aircraft to their list of aircraft which they overhaul at the current facilities at ECG. Approximately 23.5 acres (ground lease) is reserved for DRS Technologies expansion in the Phase I area. They anticipate adding three additional 80,000 s.f. hangars and one smaller building.



Aerial photo of Elizabeth City/CGAS Airport facing North (source: AEDC website [http://discoverec.com/why\\_ec/photogallery.php](http://discoverec.com/why_ec/photogallery.php))

DRS Technologies (originally TAMSCO) is now a subsidiary of Finmeccanica North America. Finmeccanica is an Italian company with headquarters in Rome, Italy but they have a strong presence in the U.S. with 12,000 American employees in 20 states and nearly 100 locations ([http://www.finmec.com/themes/garland/pages/news\\_pdfs/simonebemporad.pdf](http://www.finmec.com/themes/garland/pages/news_pdfs/simonebemporad.pdf)). DRS Technologies also has a sister company by the same name located in India as a division of Finmeccanica in that country ([http://www.finmec.com/themes/garland/pages/press\\_pdfs/ComFin\\_AEROINDIA\\_09\\_02\\_11\\_ING.pdf](http://www.finmec.com/themes/garland/pages/press_pdfs/ComFin_AEROINDIA_09_02_11_ING.pdf)).

The following material is taken from the Albemarle Economic Development Commission website to describe the Elizabeth City Aviation Research & Development Commerce Park:

“The Aviation Park (or ARDCP) is located across Consolidated Road from the U.S. Coast Guard Air Station which is one of the largest Coast Guard bases in the U.S. The airport runway is 7,200 feet in length. The ARDCP is connected to the airport runway by a taxiway which is rated as “C-130 class” to accommodate the Coast Guard aircraft which will use the future facility. The infrastructure represents a \$12 million investment and future investment for the education/training facilities are estimated at \$18 million. The education/training facilities will house the Aviation Science (or Aviation



management) program which includes flight training and includes an Avionics track and is offered by Elizabeth City State University (ECSU). The College of Albemarle (COA) will also utilize a new facility when available to offer the Air Frame Certificate Program and the Air Plant Program is scheduled as a future offering by COA.

The Phase I development will occupy 63 acres and will consist of three 80,000 s.f. hangars and a fourth hangar of about 60,000 s.f. The infrastructure is in place for the 63 acres. Construction of the hangars and other facilities are to be completed as needed and/or when funding becomes available. Funding to construct the ECSU and COA facilities for the Aviation Science program and the Air Plant Program is anticipated to be available in 2011 (subject to budget approval)."



Aerial photo of Hangars currently at Elizabeth City/CGAS Airport  
(Source: AEDC website [http://discoverec.com/why\\_ec/photogallery.php](http://discoverec.com/why_ec/photogallery.php))

This photo shows the current Telephonics building in the left foreground and the two 80,000 s.f. hangars used by DRS Technologies currently (in the center of the photo). The taxiway can be seen in the top of the photo just beyond the second hangar (i.e. the white strip angled at 90 degrees to the runway). The property in the upper right of the photo is the Phase I site.

The Phase II development at ARDCP depends on acquisition of additional land which is immediately adjacent to the 63 acres of Phase I (extreme top right of the above photo). Phase II is anticipated to be either 48 acres or 72 acres depending on the results of negotiations with property owners. That acreage would permit construction of at least 5 and possibly as many as 9 additional hangars during Phase II development. Negotiations are underway for property acquisition and plans for infrastructure will follow in short order.



The ARDCP does offer a number of incentives including:

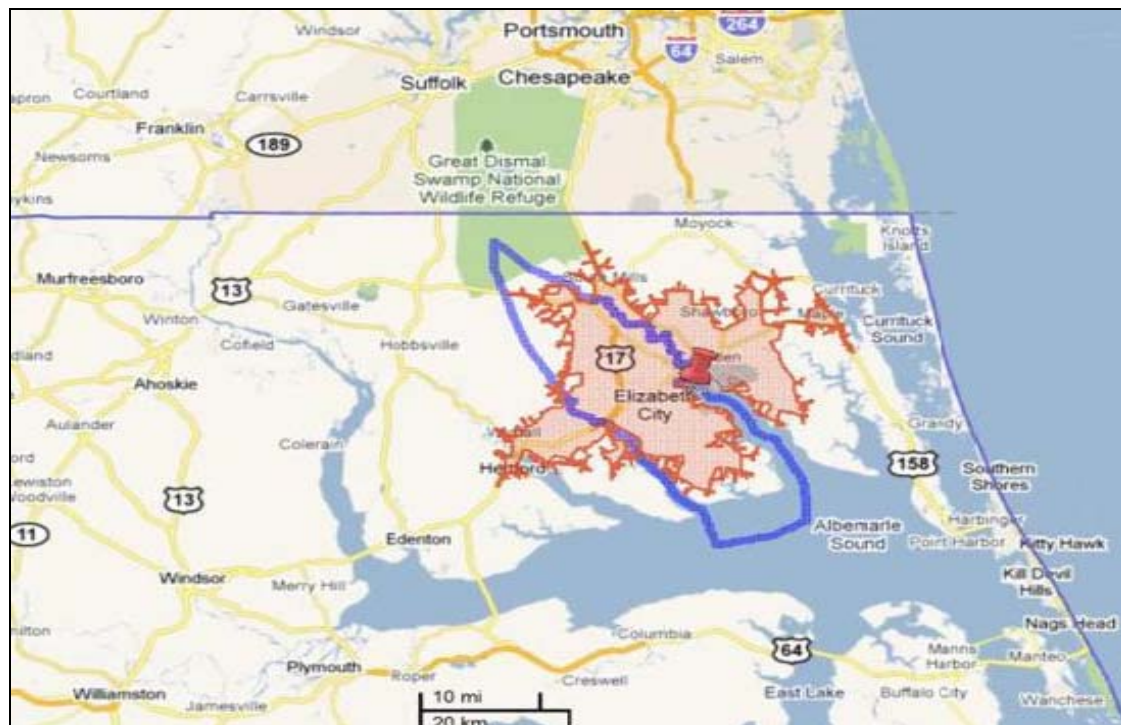
- NC state 3J Tax Credits of up to \$5,000 per job created and 5%/\$1 million capital investment.
- Job Development Investment Grant (JDIG) eligibility for projects created 100 or more jobs.
- Local institutions will assist with training programs and customized curricula to address specific company requirements.
- Possible discount from market ground-lease rate negotiable based on number of jobs created.

## Potential for Expansion of ARDCP

The land across Weeksville Road from ECG is not runway accessible and would also be restricted for potential development due to flight path restrictions. The potential to expand in the direction of TCOM to the south from the airport and from ARDCP has been offered as one possibility for consideration. The Phase II expansion and any future expansion depends on finding a property owner willing to sell, purchasing the property and extending the needed infrastructure.

Support operations such as machine shops or job shops would not face the same limitations as aircraft maintenance and overhaul operations since the small shops would not require runway/taxiway access. Any locations in close proximity could be used for these support-type operations that do not involve the physical movement of the aircraft.

**Figure 2-6: Logistics Village 3 Elizabeth City Site 30-Minute Drive Time**



Elizabeth City: 0 Bldgs from search; 30 Minute Drive Time Area

©2011 Google, ©2011 North Carolina Department of Commerce

Sector	Avg. Emp.	% of Total	Avg. Wkly Wage
Healthcare and Social Assistance	3,139	18.7	\$649
Retail Trade	2,653	15.8	\$436
Educational Services	2,268	13.5	\$552
Public Administration	1,852	11.0	\$694
Accommodation and Food Services	1,419	8.4	\$202
Transportation and Warehousing	1,347	8.0	\$656
Manufacturing	709	4.2	\$668
Wholesale Trade	631	3.8	\$647
Construction	623	3.7	\$612
Professional and Technical Services	426	2.5	\$818

**Table 2-1: Pasquotank County Labor Market**

(Source: [http://discoverec.com/whos\\_here/industrysectors.php](http://discoverec.com/whos_here/industrysectors.php))

The favorable information from the Table indicates that the Transportation and Warehousing sector has a substantial employee count with 1,347 workers and 8.0 percent of the total area workforce. The Manufacturing sector also has a respectable number of employees at 709.

In the “Agri-business” category, Pasquotank County has a number of accomplishments which rank high in the 100 counties of North Carolina including:

- #1 in Irish potato production
- #1 in sorghum production
- #3 in soybean production
- #4 in wheat production
- #7 in corn production
- 157 farms in Pasquotank County and 70 in Camden County generated agri-business sales of more than \$86 million
- 4,000 acres of potatoes are grown specifically for potato chips

These rankings and results are based on 2007.

(Source: [http://discoverec.com/whos\\_here/industrysectors.php](http://discoverec.com/whos_here/industrysectors.php))

In the Tourism sector, Pasquotank also has a substantial economic stake as the following statistics indicate:

- Domestic tourism in Pasquotank County generated an economic impact of \$43.9M in 2006.
- More than 1,582 jobs in Pasquotank County were directly attributable to travel and tourism.

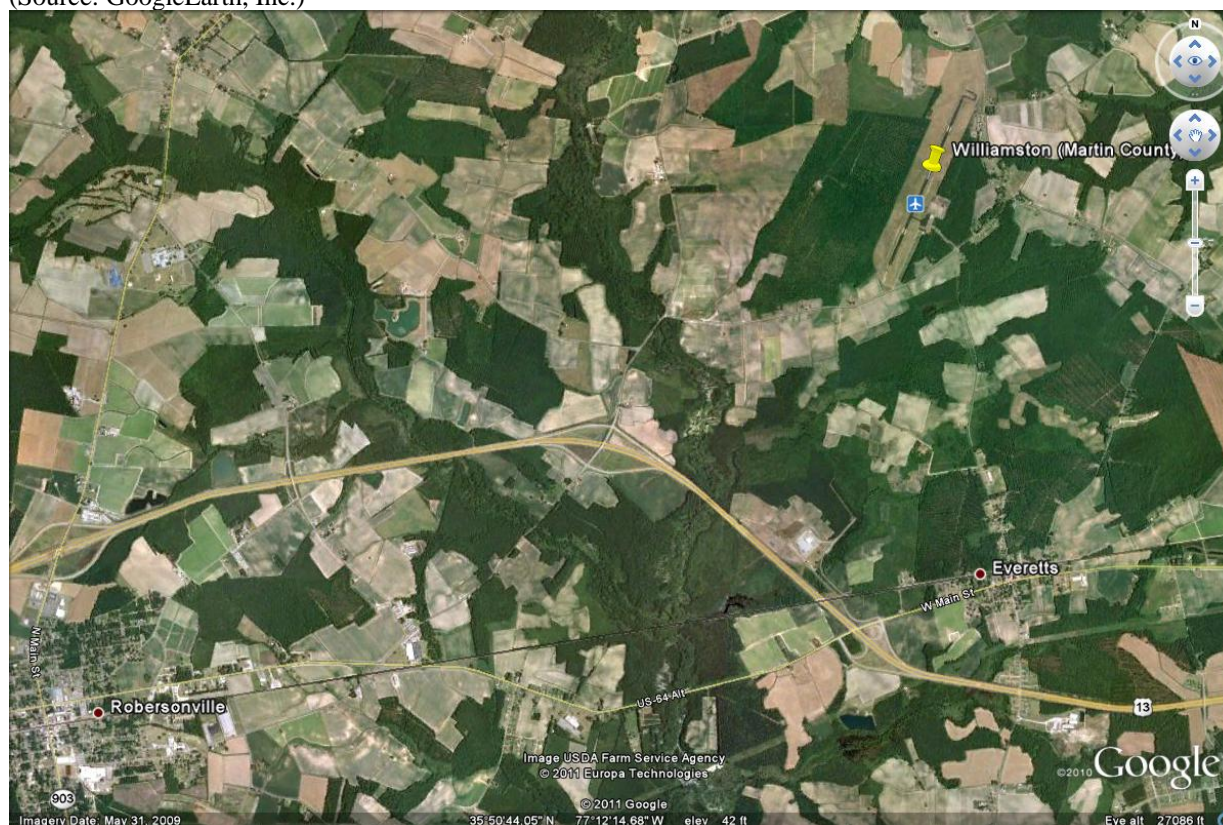
(Source: [http://discoverec.com/whos\\_here/industrysectors.php](http://discoverec.com/whos_here/industrysectors.php))

## 2.4 Logistics Village 4 – Williamston Area

Martin County is located on the southern edge of the Northeast Region of North Carolina and adjacent to two counties belonging to the East Region. The county boasts a high quality of life, excellent access to education resources and a favorable business environment. The site for evaluation is located in close proximity to the Martin County Airport and the town of Everetts. A large segment of Martin County can be seen in the aerial photograph, Figure 2-7, below.

**Figure 2-7: Aerial View of Logistics Village 4 Williamston Site**

(Source: GoogleEarth, Inc.)



Martin County has an excellent transportation asset in U.S. 64 which traverses the county from east to west. U.S. 64 provides an interstate-quality roadway with restricted access across most of the county and the region. A major crossroad for East-West and North-South connections occurs in Williamston when U.S. 64 and U.S. 17 intersect. U.S. 64 also provides excellent linkage to points to the immediate west including Edgecombe County, Rocky Mount, I-95 and the Triangle Region. Another important asset is the CSX rail line which runs in close proximity and parallel to U.S. 64. Rail is utilized for wood products, materials for concrete, grains for the poultry industry and resins for plastics manufacturers in the Northeast Region.

In Figure 2-7, the major highway running West to East is labeled as 13 but it is actually U.S. 64 which also includes highway 13 for a portion of the distance in the Northeast. The Martin

County airport is shown at the top right. Robersonville is one population center in the county and Everetts is the site of the industrial park with the plastics company, Syfan Manufacturing, located there.

More than fifty (50) carriers provide service to Martin County including the major national carriers. A number of local independent trucking companies are also available for service. More than half of the major carriers offer daily service for less than truckload (LTL) deliveries often used by companies operating on a just-in-time system.

Williamston and Robersonville are population centers and also have the best infrastructure. The water and sewer capacities are listed in the following Table:

**Table 2-2: Water**

	Daily Capacity (Gallons)	Average Daily Use (Gallons)	Average Surplus (Gallons)	Elevated Storage (Gallons)
Williamston	2,400,000	900,000	1,500,000	1,000,000
Robersonville *	2,200,000	1,500,000	700,000	1,300,000

\* Serves the towns of Robersonville, Parmele, and Everetts (includes industrial park).

**Table 2-3: Sewer**

	Daily Capacity (Gallons)	Average Daily Use (Gallons)	Average Surplus (Gallons)	Type of Treatment
Williamston	2,000,000	1,153,000	847,000	Aeration
Robersonville *	2,400,000	1,300,000	500,000	Biological

\* Parmele and Everetts have sewer with wastewater treatment by Robersonville.

For the future vision, Martin County expects to focus on Wood Products, Green Fuels, and Food Products according to Marvin Davis, Director of Operations (Personal Communication, Feb. 2011).

Martin Community College is a valuable educational asset for Martin County and surrounding counties. Martin CC has a very strong relationship with business and industry with a variety of education and workforce training programs including:

- New and Expanding Industry Training (NEIT) – eligible industries from new, expanding and existing industrial firms can request specific training programs through the NEIT program. Martin CC will develop and deliver the requested training for new or expanding companies that create at least 12 new jobs within the next year.
- Focused Industrial Training (FIT) – existing manufacturing firms are eligible for customized training programs developed through FIT. Special skillsets such as statistical process control, welding, CNC machining, and team performance are a few examples of the possible FIT curriculum.
- North Carolina Manufacturing Certification Program – courses in teamwork and communications, mathematics and measurements, problem solving, and other custom-



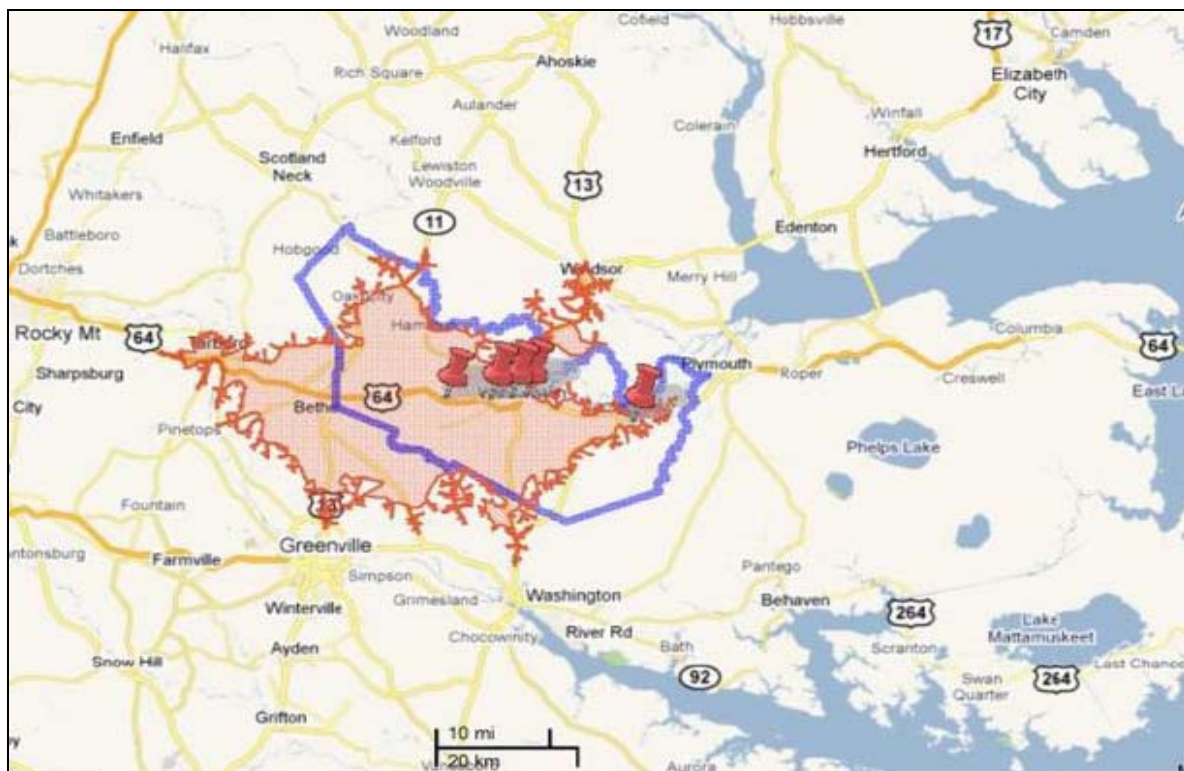
designed topics are offered. Manufacturers may also choose to have the entire certification program to their employees.

- Occupational Extension Classes – classroom training and on-site training are offered on topics such as Supervisory Training, Programmable Logic Controls, Computer classes and Industrial Maintenance.

These examples and other offerings indicate the comprehensive support that Martin CC provides for business and industry in the area.

Online Courses and on-campus university programs are also available in the area. Martin CC, East Carolina University (ECU), Elizabeth City State University (ECSU) and North Carolina State University offer online degree programs which are readily accessible for Martin County residents. ECU and ECSU are within reasonable commuting distance for residents seeking a more traditional on-campus education.

**Figure 2-8: Logistics Village 4 Williamston Site 30-Minute Drive Time<sup>1</sup>**



©2011 Google, ©2011 North Carolina Department of Commerce

<sup>1</sup> <https://edis.commerce.state.nc.us/EDIS/maps.html>

## 2.5 ***Logistics Village 5 – “Import/Export Megasite” Village for the Northeast Region***

The Northeast Commission has discussed a number of “out-of-the-box” proposals as potential development opportunities to forge a stronger relationship with the Hampton Roads area and the Virginia Ports. According to Vann Rogerson, President and CEO of the Northeast Commission, recent discussions have focused on two different sites along the Chesapeake & Albemarle (C&A) short line rail in the Northeast Region. The following summaries describe the two locations being discussed.

***Pasquotank County U.S. 17 Bypass*** – this site was previously marketed under the name “Tanglewood”. The site contains a total of more than 5,000 acres but the discussion has centered on a sub-parcel which still amounts to nearly 3,900 acres and is believed to have the best access to U.S. 17 Bypass, the rail line and other infrastructure. This location is less than 50 miles from the Virginia Ports in Norfolk and Newport News. The Portsmouth Marine Terminal is less than 40 miles away. The following statements highlight the need for further research and further discussions about this specific site:

- Formerly marketed under the name “Tanglewood”.
- The property is divided by U.S. 17 Bypass with a portion on the East side of the Bypass and a portion on the West side of the Bypass.
- The East side property has water, sewer and utilities available from adjacent properties and would require a short extension to provide the needed infrastructure.
- The West side property does not have water, sewer and utilities available in nearby properties. These infrastructure requirements involve running extensions across/under U.S. 17 Bypass which will be costly.
- Rail is more accessible on the East side than on the West side.
- There is a concern that the East side may now be zoned for Commercial and Residential development rather than Industrial or Light Industrial development. Based on Commercial Real Estate listings on [www.loopnet.com](http://www.loopnet.com) the zoning appears to be correct for the East side of US 17 Bypass.
- The West side is believed to be zoned for Industrial or Light Industrial. Based on Commercial Real Estate listings on [www.loopnet.com](http://www.loopnet.com) the zoning appears to be “Agricultural” for most of the property West of US 17 Bypass.

***Perquimans/Chowan County Border*** – this site also lies in close proximity to the C&A rail line and in close proximity to U.S. 17. This location would be centrally located within the Northeast Region. Approximately 90 percent of the Northeast Region is located within 60 miles from this site. The distance from the Virginia Ports is approximately 60 to 65 miles with two options for freight transport: U.S. 17 and the Chesapeake & Albemarle Railroad. This site affords ready access to other transportation routes including continuing southward on U.S. 17, to the north trucks can connect to U.S. 158 and another option to the south, U.S. 64, can be reached via NC routes 32 and 37 or via U.S. 17.

One of the partner counties for this site, Perquimans County, recently completed a strategic evaluation which resulted in the following priorities:

- Marine (boat builders and suppliers)
- Construction (primarily residential)
- Professional Services
- Distribution Facilities

Source: <http://www.perquimanscountync.gov/index.php?page=departments&userid=59>

The Marine and Distribution priorities would be compatible with a potential logistics village on the Perquimans/Chowan County Border. Focusing on Distribution Facilities would be most compatible with the idea of developing an Import/Export relationship with the Virginia Ports in Hampton Roads.

In late January, 2011 a groundbreaking ceremony was held for the “Perquimans Marine Industrial Park.” This site has 72 acres and is surrounded by 300 acres which are also available for acquisition and development (Wilson, 2011a). This development is located within the Perquimans Commerce Center with waterway access on the Perquimans River. This site is also located in close proximity to U.S. 17.

The Northeastern Regional Airport in Edenton is easily accessible from this location for air cargo requirements as needed. The opportunity for combined efforts by two counties is another favorable factor for this potential site.

## ADDITIONAL INFORMATION RELATED TO POSSIBLE MEGA-SITE Chesapeake & Albemarle Railroad Corridor (from Norfolk to Elizabeth City and Edenton)

There are numerous opportunities along the Chesapeake & Albemarle short line railroad. These opportunities consist of both “green field” and “brown field” locations.<sup>2</sup>

Among the “green field” locations, Tanglewood in Pasquotank County and west of Elizabeth City is a “mega-site” with more than 5,000 total acres packaged together at one point in time.

### Elizabeth City - PROPERTIES AVAILABLE

#### *Auction conducted on March 22, 2011 and sold to Mr. Jim Justice:*

US BYPASS 17 and Halstead Boulevard

3,915 Acres of ‘Agricultural’ Land with 2,820 acres of tillable farmland and 1,000 acres of timber. Described as “Close proximity to rail, shipping and highways. Adjacent to highway interchange and recent developments. Well maintained interior roads. Network of open ditches provides excellent drainage and subsurface irrigation. Excellent double crop wheat and soybean yields with previous years of 200 bushel/acre corn. Timber ground provides excellent hunting opportunities, development potential and possibility of clearing for farm expansion.”

“Located near the intersection of US 17 Bypass and Halstead Road on the west side of Elizabeth City, NC.”

(SOURCE: <http://www.loopnet.com/Listing/17026861/US-Bypass-17-and-Halstead-Blvd-Elizabeth-Cit....>) [Note: the website may require registration and payment]

The property appears to lie west of US 17 Bypass and appears to be part of (or adjacent to) the Tanglewood Property (in bankruptcy). The property lacks the infrastructure for water, sewer, electricity and natural gas since it currently is intended for Agricultural use. The nearest connections to utilities are on the opposite side of US 17 Bypass.

#### Halstead Boulevard Extended 160 acres Commercial

“Prime +/- 160 acre property on both sides of Halstead Blvd Ext (Hwy 344) in Elizabeth City near new Hwy 17 bypass & Super Wal-Mart with convenient access to Virginia & other nearby towns in the Albemarle Area. Property consists of 2-3 parcels and has 3,200’ of road frontage with NCDOT curb cuts allowed on both sides. Multiple uses possible including Commercial, Retail, Residential, etc. Site is currently in County but can be annexed into City like surrounding properties for City Sewer, Water, & Electric services if desired. This property is listed for a lower price than any other parcel has been sold for since this new Road has been completed. Halstead Extended is the new hub for the largest Commercial, Retail, & Residential development

<sup>2</sup> The term “green field” designates an undeveloped piece of land which may only be used for agricultural purposes. The term “brown field” refers to an industrial property which has previously been developed and used but may now be abandoned or underused (Paraphrased from Source: Answers.com).



in Elizabeth City & Northeast NC and this site is located midway between the two biggest intersections & new Commercial developments. Super Wal-Mart, Dollar Tree, McDonald's, PetSense, Fairfield Inn, Hall Honda, IHOP, 7-11, and dozens of Retail & Office users have built in this area recently, and the site is adjacent to one of the largest new residential developments in the area."

"For Sale \$4,000,000 or \$25,000 per acre, will subdivide."

SOURCE: <http://www.rich-company.com/halsteadext160acrescommercial/index.html>

NOTE: Based on several small properties and one medium sized property - Everything EAST of US 17 Bypass appears to be zoned for Commercial, Retail and Residential. Everything WEST of US 17 Bypass appears to be zoned "Agricultural" (with the possibility of going through the process to change the zoning for Light Industrial or Industrial). The EAST section has ready access for City Services and can be annexed (via "satellite annexation") to facilitate gaining access to those services. Properties on WEST side of US 17 Bypass do not have the infrastructure in place (and there is not an adjacent property with infrastructure) since these properties are largely Agricultural at the current time. Satellite Annexation would also be needed in order to obtain access to city water and sewer to be extended to the WEST side of US 17 Bypass.

From Moyock, NC to Edenton, NC there are TEN properties listed for sale (two of those are the Tanglewood site listed in duplicate) along the C&A Rail line. These properties are all listed on the WEBSITE for RailAmerica (<http://www.railamerica.com/Industry/Dev/Property....>). [Note: you must then click on the dot for the C&A Railroad in NC]

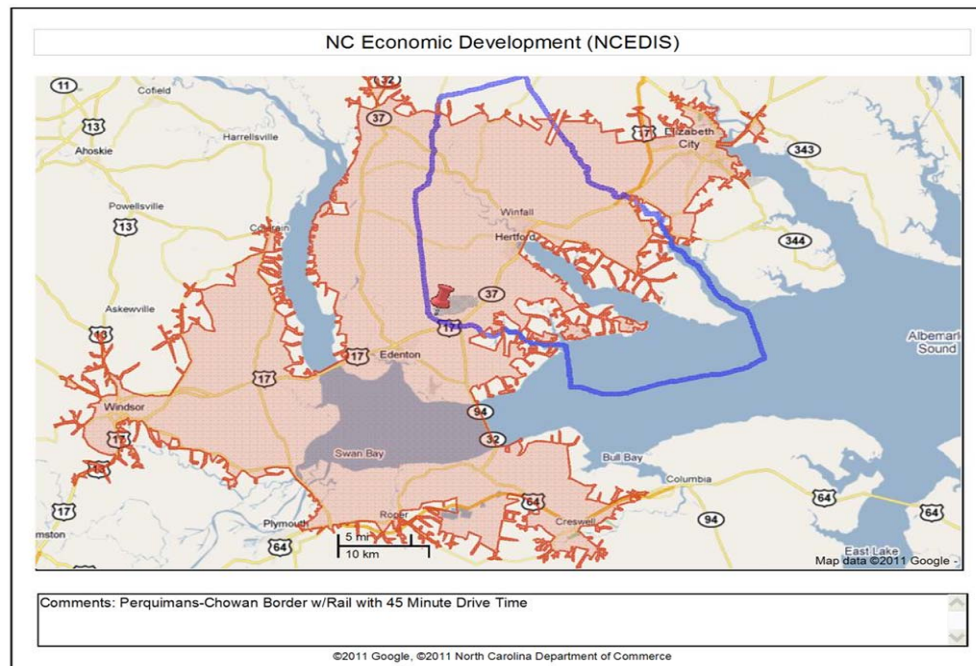
Figure 2-9 is a map centered on the Perquimans/Chowan county border. The blue outline indicates the border of Perquimans County. Chowan County lies to the west and the south of Perquimans. The highlighted area indicates the 45 minute drive time area surrounding the center point.

Figure 2-10 shows the overall region along the C&A Rail and U.S. 17 which could be developed as a "virtual logistics village" with several different locations participating in freight handling, distribution or other logistics services. The area extends from near the Virginia border across Camden County then across Pasquotank and Perquimans counties and reaches Chowan County on the south end.

**Figure 2-9: 45-Minute Drive Time From the Center Point**

Print Layout

Page 1 of 1



[https://edis.commerce.state.nc.us/NCDOC/EDISviewer/EDISviewer/print/print\\_a\\_landsc...](https://edis.commerce.state.nc.us/NCDOC/EDISviewer/EDISviewer/print/print_a_landsc...) 2/18/2011

**Figure 2-10: Virtual Logistics Village – C&A Rail and U.S. 17 Corridor**

(Source: GoogleEarth, Inc.)



### 3 Regional Summary

In this section, the four original logistics village sites are summarized in several tables along with the additional logistics village along the rail line in the Pasquotank, Perquimans and Chowan County area. The information in the tables is compiled from interview data, published data and synthesis of items from different sources.

The final portion of this section is a summary discussion for industry clusters and the logistics requirements for those industry clusters. These discussions should be viewed as options among all of the possible “alternative future visions” for the logistics villages in the Northeast Region. These alternative future visions for the Northeast Region include:

- Life Sciences and Biotechnology
- Aviation
- Renewable Energy or “Green” Energy
- Boatbuilding/ Marine Trades

#### Regional Infrastructure Needs

To summarize the major needs for the Northeast Region, we must extract comments from different places in the larger report. The needs for the Northeast Region are very basic in nature. The two major highways, U.S. 64 and U.S. 17, need to be completed as multilane highways throughout the entire Northeast Region. For U.S. 64, the segments in the extreme eastern part of the region need to be completed including a segment beginning near Williamston and extending across a portion of Washington County. For U.S. 17 the primary segment needing completion lies between Williamston in Martin County and Washington in Beaufort County. To improve access to Virginia, the main bottleneck for U.S. 17 is actually located in Virginia in the general area of Chesapeake. The most significant improvement for U.S. 17 depends on action by Virginia to replace the “steel bridge” which will allow for four-lanes through that stretch of U.S. 17.

If certain locations are selected for a logistics village development there will be a need to improve or widen the existing two-lane. Jerry Jennings, NCDOT Division I Engineer, made a very important observation that specific industries moving into the region may require improving two-lane roads for “pavement strengthening” to handle increased weights and that is usually more important than widening. Jerry also suggested that U.S. 158 should be mentioned as a main corridor which cuts across the northern part of the region connecting from I-95 all the way to the Outer Banks. Several segments of U.S. 158 from Murfreesboro to Winton and also in Gates County are listed among the current TIPS for widening projects. U.S. 158 serves a variety of purposes for manufacturing, trucking and tourism. Jerry also mentioned another route, U.S. 168, which plays an important role for tourism and for NC residents commuting to Virginia for their jobs. He felt that the improvements for the NC portion of U.S. 168 were complete and that the highway was in very good condition.

The other infrastructure in need of significant improvement is the rail system for the short line railroads, the Chesapeake & Albemarle (C&A) and the North Carolina/Virginia (NCVA). Both of these short lines are actually part of the larger company, Rail America. Discussions with

individuals at the Northeast Economic Developers (NEED) meeting indicated that some rail sections have speed limits of 10 miles per hour and this was believed to be because of the condition of the railway in those areas. With repairs and improvements the travel speeds could be increased and the time for shipping by rail throughout the region would be improved significantly. Specific rail segments were not analyzed in detail during the course of this project.

**Table 3-1: Assessment Matrix**

Measure	Village 1 Ahoskie	Village 2 Edenton	Village 3 Elizabeth City/CGAS	Village 4 Williamston	Village 5 Import/Export Megasite
Facility Type*	Warehousing and Distribution	Distribution and Light Manufacturing	Maintenance and Repair Facility; Light Manufacturing	Distribution and Light Manufacturing	Distribution and/or Intermodal
Target Industries	Agri-business; MRO for other Warehouses; Import/Export	Boatbuilding/Marine Trades; AGRI-Business	Aviation/Defense Industry	Wood products & AGRI-Business	Import/Export for retail OR manufacturing supplies
Speed of Implementation	3 to 5 years or more	1 to 5 years	1 to 5 years	1 to 5 years	3 to 5 years or more
Infrastructure - Transport					
Highway	US 158, NC 11 & US 13, NC 42 & NC 45	US 17 & connection to US 64 in the South	US 17 & connection to US 158	US 64 & US 17	US 17 & 17 Bypass
Rail	North Carolina-Virginia RR	Chesapeake & Albemarle RR	Chesapeake & Albemarle RR	CSX Railroad parallel to US 64	Chesapeake & Albemarle RR
Air	Tri-County Airport	Northeastern Regional	Elizabeth City/Coast Guard Air Station (CGAS)	Martin County Airport	Elizabeth City OR Northeastern Regional
Existing runways	4000	6000	7219	5000	7219 or 6000
Can runways be extended?	Partially constrained by existing roadways	Yes if needed; acceptable as is for 727s and 737s	Not needed; C-130 class	Yes if needed	Yes if needed
Maritime (ship/barge)	Barge service currently to Nucor site	Barge site near airport	Near to Virginia Port; Barge site on north side of Elizabeth City	Possible barge access on Roanoke River at Jaskey Site	Nearest location to Virginia Port; Barge service available
Infrastructure – Other					
Communications	HS Internet; fiber optic	HS Internet; fiber optic	HS Internet; fiber optic upgrade to 1000 MB per second by Sept. 2012 by MCNC	HS Internet; fiber optic	HS Internet; fiber optic upgrade to 1000 MB per second by Sept. 2012
Power	NC Power, Roanoke EMC	Edenton Municipal, Dominion NC	Elizabeth City Municipal, Dominion NC	Dominion NC, Edgecombe-Martin EMC, Greenville, Halifax EMC, & Robersonville	Dominion NC, Elizabeth City Municipal, Edenton Municipal
Water	Town of Ahoskie	Edenton	New Reverse Osmosis plant; Elizabeth City	Martin County, Williamston or Robersonville	New Reverse Osmosis plant for Eliz. City; Perquimans/Chowan
Sewer	Town of Ahoskie	Edenton	Elizabeth City	Martin County, Williamston or Robersonville	Eliz. City; Perquimans/Chowan
Land Available (acreage)	2 “mega-sites”; 4 smaller sites: 245 acres Light Industrial (LI); 219 acres LI; 107 acres Comm. – can be rezoned; 47 acres at Ind. Park	600 acres around the airport	63 acres with infrastructure; 48 to 72 acres under negotiation to be purchased; more in the area	3 sites with 110 acres, 700 acres and approximately 100 acres	Over 5000 acres but focus on smaller 400 acres up to 1,000; PERQ/Chowan ### acres?
Labor Force					
Availability	Good availability of workers	Good availability of workers	Good pool; some ex-Coast Guard	Good availability of workers	Good availability of workers
Education Programs to Support Local Industry	Roanoke Chowan CC	College of Albemarle, Edenton campus	Elizabeth City State University and College of Albemarle	Martin Community College	College of Albemarle
Specialty Criteria**	Hub and spoke site to serve other warehousing/ distribution sites OR AGRI-Business	Combined modes of water, ground and air	Homeland Security – Coast Guard; Aviation.	“Bundled” or “virtual village” for three sites in proximity to US 64 and CSX Rail; or Bundled for U.S. 64 corridor in the region	Potential for Import/export and distribution



**Table 3-2: Portal Site Summaries – Detailed Comparative Assessments**

	<b>Ahoskie</b>	<b>Edenton</b>	<b>Elizabeth City</b>	<b>Williamston</b>	<b>Pasquotank/ Perquimans/ Chowan along C&amp;A Rail</b>
Geographic Reach	Regional for NC & VA	Regional for NC & VA	International using VA Ports	Regional primarily NC	International using VA Ports
Economic Sector					
Agriculture	Cotton, corn for grain, & soybeans are leading crops	Cotton and soybeans are leading crops	Leads in many crops: Potatoes, soybeans, corn & wheat	Wood products; Cotton and soybeans are leaders	Same as Elizabeth City
Tourism	Heritage tourism	Heritage tourism	Heritage tourism	Heritage tourism	Heritage tourism
Health & Wellness	Roanoke Chowan Hospital	Chowan Hospital; UHS of EC	Albemarle Hospital; Regional Oncology Center	Martin General Hospital	Albemarle
Military Support	N/A	NC National Guard Armory	U.S. Coast Guard	N/A	N/A
Aerospace Manufacturing	N/A	Airport industrial park is a potential site	Aviation Research & Development Commerce Park at Airport	N/A	N/A
Other Advanced Manufacturing	Nucor Steel	Boatbuilding near airport & waterfront; biofuels proposal	TCOM blimps and aerostats; wind farm proposal	Plastics – shrink wrap by SyFan	N/A
Retail			Wal-Mart, Belk		Wal-Mart
Preparedness					
Highway	Mainly state routes	U.S. 17 and reasonable access to U.S. 64	U.S. 17	U.S. 64 and intersection with U.S. 17	U.S. 17 and Bypass
Rail	NC & VA short line	C&A short line	C&A short line	CSX traverses county	C&A short line
Air	4,000 ft. runway; inadequate for air cargo	6,000 ft. runway; adequate for 727 air cargo	7219 ft. runway; rated suitable for C-130s	5,000 ft. runway; adequate for small air cargo planes	N/A
Maritime	Barge site in use	Barge site in	Barge site in	Potential barge	Close proximity to

Support	by Nucor Steel on Chowan River	use near airport on Albemarle Sound	use on river north of Elizabeth City	site on Roanoke River	barge site in Elizabeth City
Developable Land	Substantial amounts; two mega-sites	600 acres surrounding the airport	63 acres with infrastructure ready; 48 to 72 acres to be acquired; other available	Three different industrial sites with 110, 700 and 100 acres available	Multiple sites along C&A available; substantial land available in surrounding area
Power/Gas	Available; proximity depends on locations	Adjacent border	On-site	On-site for 2; on adjacent property for 3 <sup>rd</sup> site	East of U.S. 17 Bypass but would need to be extended to West side of Bypass
Water/Sewer	Depends on exact site; Ahoskie is favorable	Available on adjacent properties	On-site	On-site for 2; on adjacent property for 3 <sup>rd</sup> site	East of U.S. 17 Bypass but would need to be extended to West side of Bypass
Information Technology/Communications	Adequate	Good	Good; to be upgraded with new fiber optic by MCNC	Good	Good
Environmental Issues	Waterway – river	Waterways – river & sound	Waterways – river & sound	River at Jaskey site	
Tax Incentives	Tier 1	Tier 2	Tier 2	Tier 1	Tier 2
Education and Research	Roanoke/Chowan CC	College of Albemarle	Elizabeth City State U.; COA	Martin CC	Elizabeth City State U.; COA
Inter-Institutional Organizations	Northeast Commission; NEED; Hertford County Econ. Dev.	Northeast Commission (NEC)	Albemarle Economic Development Commission; NEC	NEC; Martin County Economic Development	Albemarle Economic Development Commission; NEC
Labor Pool	Good	Good	Good	Good	Good
Upfit Cost	Moderate	Moderate	Moderate	Moderate	Moderate to High
Nearest Port	Norfolk	Norfolk	Norfolk	Morehead City first and then Norfolk	Norfolk



**Table 3-3: Northeast Portal Site Summaries – Alternative Functions**

	<b>Ahoskie</b>	<b>Edenton</b>	<b>Elizabeth City</b>	<b>Williamston</b>	<b>Sites along C&amp;A rail line</b>
<b>Logistics Village</b>	Multiple sites available; two mega-sites	600 acres available wrapping around the airport	Infrastructure in place; two companies located	Three different sites for possible “bundle” or “virtual” village	One mega-site; Multiple sites available in Pasquotank, Perquimans, and Chowan on Rail
<b>Regional Portal</b>	Significant trucking currently	Barge shipments received currently; waterway for boat testing and delivery	CG aircraft through ECG	Trucking and rail for plastics, wood products and other commodities	N/A
<b>Inland Port</b>	N/A	N/A	N/A	N/A	N/A
<b>General Aviation Airport</b>	Tri-County Airport (ASJ)	Northeastern Regional Airport (EDE)	Elizabeth City/ Coast Guard Air Station (ECG)	Martin County Airport (MCZ)	ECG or EDE
<b>Specialized Logistics Facility</b>	MRO or other commodities with link to Virginia	Marine Centric -Boatbuilding; “biofuels” interest	Aviation-centric at ECG	BIOTECH focus - Wood products – traditional and biofuels; other biotech; corridor to other Biotech counties	Dependent on specific linkage with VA Ports by Rail; Renewable Energy

### 3.1 *Life Sciences and Biotechnology*

All of the counties in the Northeast Region have substantial land areas devoted to agriculture. The future vision for Biotechnology includes research and crop production for “biocrops” and “biofuels.” “Biocrops” refers to recent developments in agriculture which have led to higher value crops and highly specialized crops including bio-engineered varieties. The Vernon Jones Research Center (N.C. State University affiliate) has been located in Roper in Washington County for twenty-five years to support research and development in agriculture in the Northeast.

The term “Biofuels” refers to bioethanol or biodiesel fuels where some percentage of the carbon based fuel is replaced by some form of biomass converted from a wide variety of plant or tree feedstocks. The Biofuels Center of North Carolina located in Oxford in Granville County is working on a statewide program with the objective of replacing 10 percent of the liquid fuel consumed in North Carolina with “home-grown and home-produced biofuels by 2017”

(Source: <http://www.biofuelscenter.org/index.cfm?page=newsletter>).

The Biofuels Center was formed in 2008 and has funded 47 different grants since that time with other projects currently pending. Among the awards in 2008 was a \$ 22,000 grant for “NC Biofuels LLC Site Development” awarded to North Carolina’s Northeast Economic Development Foundation, Inc. at Edenton in Chowan County. Also in 2008, there was a grant of \$ 27,314 for the “Renewable Fuels Program” awarded to Washington High School in the town of Washington in Beaufort County (Source: <http://www.biofuelscenter.org/index.cfm?page=newsletter>).

The Biofuels Center has cooperated with N.C. State University and the North Carolina Department of Agriculture to establish 20 research centers across the state. A number of crops are grown on the Biofuels Center campus for trials and other crops are being grown across many of the counties throughout the state. Among the crops being grown for trials are:

- Giant Miscanthus
- Switchgrass
- Fast-growth Loblolly Pines
- Sweetgum trees
- Fast-growth Cottonwoods
- Tropical Sugarbeets
- Grain Sorghum
- Sweet Sorghum
- Industrial Sweet Potatoes
- Duckweed
- Algae
- Soybeans
- Sunflowers
- Canola

- Barley
- Flax
- Camelina

Source: <http://biofuelscenter.org/index.cfm?page=content&scid1=37&CategoryID=14>

Many of the trial sites are small 4 to 5 acre plots. In the Northeast Region many of these crops have been grown as regular crops including Sorghum, Sweet Potatoes, Soybeans, and Canola. Many of the tree varieties are also native to the forests of the Northeast Region.

There are numerous examples throughout the region which highlight the importance of agriculture and Life Sciences and Biotechnology. The following are just a few examples:

- AVOCA Farms with 9,000 to 10,000 acres of former tobacco farmland which now is used to grow clary sage which is used for various fragrance applications.
- Ventria, a California biotech company is growing bio-engineered rice in the Northeast Region which is used for proteins in the nutraceuticals (nutrition) industry.
- Pasquotank County is the Number 1 producer of Irish potatoes in the state.
- Bertie County is the location for Merry Hill, a town under consideration for a new pilot extraction facility.
- Martin County has wood products as a leading cluster and has vast amounts of forested land and farmland

U.S. 64 is one of several major routes through the region which serves as a critical route for agriculture. U.S. 64 provides connections in close proximity to several counties including Martin, Bertie, Washington, Chowan, Tyrrell, Hyde and Dare. All of these counties are designated as TIER 1 for 2011 with the exception of Dare County and Chowan County which are TIER 2. U.S. 64 is also in close proximity to Roper (Vernon James Research Center) and Merry Hill (potential site for new extraction plant) which stand to play a vital role in the biotechnology industry for the Northeast Region.

### 3.2 **Aviation**

The Elizabeth City/Coast Guard Air Station (ECG) airport is the prime location in the Northeast Region to focus on Aviation/Aerospace and related Defense Industries. The Aviation Commerce Park (ECG) is a planned development site adjacent to ECG with sixty-three acres that have infrastructure in place. Acquisition of an additional adjacent property is under negotiation.

Initial investments have been made in infrastructure and two companies are operating at ECG. Further development depends on the success of those companies and further land acquisition. The Aviation cluster is discussed in greater detail in the earlier section “Logistics Village 3 - Elizabeth City Area.” Please refer to that section for more information on this cluster.

### 3.3 ***Renewable Energy or “Green” Energy***

The “biofuels” discussion under Biotechnology also applies under this topic on Renewable Energy. Several of the counties in the Northeast Region are active participants in the research efforts currently underway for biofuels.

A second thrust under this sector is “green” energy which is best exemplified by the land-based wind farm project which is proposed for the Northeast Region. The site for the project covers approximately 20,000 acres in Pasquotank and Perquimans counties. A portion of the site was previously used as a mining location and the remainder of the property is farmland (Ponder, 2010).

Iberdrola Renewables (IR) is a Spanish wind energy company with wind farm installations in dozens of locations around the world. IR is based in Pennsylvania and Oregon in the U.S. and has more than forty (40) wind farm installations in seventeen (17) different states in the U.S. (Ponder, 2010; Ponder, 2011a; Wilson, 2011)

The proposed project is estimated to be a \$750 million dollar investment which would be the largest investment ever in the Northeast Region for a new development according to Vann Rogerson, President and CEO of the Northeast Commission. Approximately 150 utility-scale wind turbines will be installed on the property. The land will be closed to other uses during construction but will be re-opened to farming in the immediate area with a small buffer around each wind mill. Once the wind farm is operational, farmers will be paid an annual lease payment for the land occupied by the wind turbine. Lease payments to all area farmers affected has been estimated at \$1 Million per year (Ponder, 2011a; Ponder, 2011b).

This project will help local electric power suppliers satisfy a requirement that 10 percent of the energy come from renewable sources by the year 2018 and 12.5 percent is required by 2021 (Wilson, 2011).

The project is expected to create more than 100 construction jobs in the short term and approximately 20 to 25 jobs for ongoing operation of the wind turbines once they are operational (Starnes, 2011). If the planned schedule is met, construction will begin in 2012 and the wind farm will be operational by January, 2013 (Wilson, 2011).

A public hearing was scheduled for March 10, 2011 in Elizabeth City. The meeting was set by the North Carolina Utilities Commission to present information about the “Desert Wind Project” and to invite public comment (Wilson, 2011).

As reported on May 24, 2011, Perquimans County planners approved the permit for the Desert Wind Project which will be located partially in Perquimans County and partially in Pasquotank County (Wilson, The Perquimans Weekly, 2011).

In summary, the work on “biofuels” and the proposed development of “wind energy” combine to make Renewable Energy an emerging cluster worthy of separate consideration. The two

segments will also require somewhat different transportation and logistics resources. Biofuels will require new extraction or refining facilities and storage/blending/distribution facilities (and all of those activities may be performed a single facility). Depending on the scale this could lead to small, medium or large “tank farms” which are characteristic of the petroleum products industry. Distribution is likely to be handled by tanker trucks.

The development of a wind farm will have a challenging set of logistics requirements during the construction phase and then will have very limited logistics requirements once the wind turbines are operational. The size of the wind turbine equipment will require a significant number of “oversized load” shipments via waterway and roadway as the equipment is moved to the construction sites throughout Pasquotank and Perquimans counties (assuming that is the chosen site). Barge shipments may be used to minimize the distances traveled by ground transportation. But to utilize barge shipping, new larger rubber-tired cranes may be needed at the barge sites to handle the oversized wind turbine components.

### 3.4 ***Boatbuilding/Marine Trades***

Given the numerous waterfronts and waterways of NCNE and the long standing history of boatbuilding, this industry cluster will continue to be a significant factor in the Northeast Region’s economy. A total of sixty-seven (67) boatbuilding companies are listed by one source (<http://www.boatbuilders.us/north-carolina.htm>) for the state of North Carolina and twenty-four (24) of those boatbuilding companies are located in the Northeast Region. Edenton and Wanchese are boatbuilding centers and other boatbuilding locations are scattered around the Northeast Region along the most accessible waterways.

The North Carolina Seafood Park Authority (NCSPA) is responsible for the Wanchese Seafood Industrial Park in Dare County. That location is fully occupied so the NCSPA has looked for other locations to expand. Based on a feasibility study completed in 2006, a location in Perquimans County along the Perquimans River was identified as the number one potential site for expansion (Wilson, 2011a).

In early 2011, a groundbreaking ceremony was held for the “Perquimans Marine Industrial Park.” This location is owned and developed by NCSPA and represents the desired expansion which will include Marine Trade companies (Wilson, 2011a). The site has 72 acres and is surrounded by 300 acres which are also available for acquisition and development (Wilson, 2011a). This development is located within the Perquimans Commerce Center with waterway access on the Perquimans River. Upon completion the site will have easy access to the Albemarle Sound and the Atlantic Ocean (Wilson, 2011a). This site is also located in close proximity to U.S. 17.

### 3.5 ***Relationships with Port of Virginia***

The proximity of the Northeast Region to the Port of Virginia in Hampton Roads, Virginia also affords an opportunity to pursue **Transportation, Warehousing and Logistics** as another

industry cluster. Import/Export and Retail Goods Distribution are specific sub-categories within the larger sector which are under consideration as potential commodities to move through the Virginia Ports with a cross-docking or distribution center operating in a NCNE location.

Multiple sites along the C&A short line rail, existing trucking terminals and potential new locations for rail and truck connections are possible ways to enhance connections with the Virginia Ports in Hampton Roads. There are several ways that a logistics village in the Northeast Region could benefit from relationships with the Port and companies in Virginia. By:

- providing cross-docking, distribution and warehousing for imported and exported items entering or exiting through the Virginia Ports in Hampton Roads;
- by providing logistics and distribution services for the products produced in Virginia;
- by providing manufacturing locations and logistics for suppliers to those Virginia manufacturing companies;
- and by providing warehousing and distribution for raw materials and maintenance, repair and operating (MRO) supplies needed to support operations in Virginia.

### Addendum for Northeast Clusters

Elsewhere in this report the Life Sciences and Biotechnology cluster is described with an emphasis on higher value crops and new uses for specific crops. In addition to the material in that section, it is important to emphasize that the Northeast Region has a strong presence in Forestry Industries or wood products in several forms. One growing product category is the export of wood pellets as a biomass material to be burnt as a fuel to generate electricity or for heating. The shipment of wood pellets was discussed by several individuals at the GLTF meeting at Morehead City on April 18, 2011.

Paper is another derivative wood product that is an important part of the existing Northeast Region's industries. "Fluff" is one of the more recent products which has become important in the Northeast Region at the Domtar Paper facility in Plymouth, NC. "Plymouth Fluff pulp is manufactured from Loblolly Pine. It is a high quality cellulose pulp exhibiting excellent absorbency, wicking and fluff pad integrity. Its low fiberization energy and excellent fiberization quality make it a popular choice in the production of a wide variety of absorbent products" (Source: <http://www.domtar.com/en/pulp/products/9421.asp>).

The primary corridor for wood products is U.S. 64 with the main focus being Martin County and Washington County. A logistics village for the various wood products industries could in fact span a distance of 50 miles or more along the U.S. 64 corridor. This concept would be similar in nature to the "virtual logistics village" as discussed in the Southeastern Region report. This idea will be discussed in more detail below.

Traditional "Agriculture" also warrants more explicit discussion. The Northeast Region is a major exporter of grains, sweet potatoes, cotton and other crops. The region has five (5) certified scales which are needed to provide accurate weights for the contents of containers used to export the various crops.

Several agricultural companies in the Northeast Region are home to the certified scales. These companies are C.A. Perry and Son, Inc with three locations: Elizabeth City, Hobbsville, and Morgan's Corner; Parkway Ag is the second company with a location in Elizabeth City; and George Wood Farms is located in the town of Camden. One other scale is available in eastern NC at Rook's Farm Service in Burgaw, NC which is located in the Southeastern Region of NC (Source: Peter Thornton, NCDA&CS, April, 2011).

Another important resource located in Elizabeth City is the Northeast Grain Grading Laboratory which opened in July, 2008 to serve the export market. Soybean testing had been performed in Norfolk, Virginia prior to the opening of this facility in NC. U.S. Department of Agriculture (U.S.D.A.) "state-of-the-art" equipment was acquired and installed when the testing lab was established (Source: Peter Thornton, NCDA&CS, April, 2011).

Note that the U.S.D.A. issues the required license or certification and that the N.C. Department of Agriculture is not acceptable as a certifier for the purposes of exporting. This applies to "grain grading" which includes an evaluation of the protein content and the oil content for the soybeans being shipped for exports (Source: Peter Thornton, NCDA&CS, April, 2011).

### **Virtual Logistics Village Sites**

Two areas of the Northeast Region might also be considered for “Virtual Logistics Village” Sites. The first area to consider is the U.S. 64 corridor stretching from Martin County eastward across Washington County and extending to Tyrrell and Dare counties. The focus of this corridor would be wood products concentrated in Martin and Washington counties and other biotechnology products as it extends to the other counties to the east. The “Virtual Logistics Village” would provide an opportunity to share resources, share knowledge and provide a way to integrate the activities of several different locations along U.S. 64. A major portion of this corridor also has existing rail service or the potential for rail service via CSX.

The second area to consider as a candidate for an application of the “Virtual Logistics Village” concept is along U.S. 17 and the C&A short line railroad from the Virginia border across Currituck, Camden, Pasquotank, Perquimans and Chowan counties. There are a number of properties available in close proximity to the short line rail including the mega-site (over 4,000 acres) formerly known as “Tanglewood” which was recently acquired at auction by Jim Justice from West Virginia. Justice also acquired the Greenbrier Resort in West Virginia in 2009 and has significant holdings in farming operations in several states as well. Another property on the border between Perquimans and Chowan counties is also located along this short line corridor. The idea would again be to “bundle” several locations and encourage the sharing of resources and work towards coordinating activities and shipments to and through the multiple locations.

### **Additional Outreach to NC DOT in the Region**

Jerry Jennings is mentioned above as one contact made to include the input from a wider variety of sources. Jerry did provide some valuable input as indicated in the section above. Kerry Morrow of the Transportation Planning Branch of NCDOT is another contact who reviewed a draft Northeast Region report and shared that report with Saeed Mohamed, NCDOT-TPB coordinator for the Mid-East RPO. Kerry did provide feedback from the two TPB individuals. Kerry and Saeed saw no major problems with the items contained in the draft report. Gretchen Byrum, P.E., District 1, Division 1 of NC DOT is another person contacted and given the opportunity to provide feedback (but no feedback was given).

### **RPOs and MPOs**

The Northeast Region does not include any MPOs. Kerry Morrow was helpful with identifying and contacting the proper people with the RPOs. Steve Lambert of the Albemarle RPO was provided a draft copy of the Northeast Region report and his comments were solicited (none received). Saeed Mohammed also contacted Bryant Buck of the Mid-East RPO as part of his review of the report.

Denise Boswell is another professional planner filling in for Ann Whitley of the Peanut Belt RPO. Denise also works as a Planner in Wilson, NC. Denise did provide some very constructive feedback including observations that the extreme parts of the region are not represented among the potential Logistics Villages. She suggested that Windsor (Bertie County) and Washington (Beaufort County) might be good candidate locations in the extreme East or



Southeast part of the region. In the extreme West, she suggested that Roanoke Rapids should be considered as a candidate location.

The extreme west and extreme east locations were not included in the Logistics Village sites to be evaluated. The main reasons were the close proximity to other locations in the East Region which were being evaluated (e.g. Rocky Mount vs. Roanoke Rapids and Morehead City vs. Washington). [Note: other team members voiced those concerns at the kickoff meeting in August, 2010 regarding Roanoke Rapids]. Windsor is located near both Williamston and Edenton which are included in the Seven Portals Study for the Northeast Region. The initial focus on airports also precluded Windsor from consideration.

Denise Boswell also indicated that the 16 counties were very different from one side of the Northeast Region to the other. “I question what Halifax County would have in common with the remote Dare, Hyde and Tyrrell counties ...” (Boswell email to Monroe, April 20, 2011). This is a valid point and it highlights the difficulty of trying to develop a single Logistics Village to serve the needs of the entire Northeast Region.

These outreach efforts with DOT personnel and RPO personnel are summarized in a Table at the end of the Appendices. Methods of contact and dates are included there.

## Recommendations

Based on all of the information collected, an informed list of recommendations is offered here:

1. Continue to support and develop the Aviation-centric logistics/industrial village at the Elizabeth City/Coast Guard Air Station. Locating the educational programs at the ARDCP is a final step which needs to be taken for this particular location.
2. Work with the Port of Virginia, the Northeast Partnership, NC DOT, local companies, and Rail America (C&A Railroad) to develop a short line rail and U.S. 17 corridor with multiple locations for logistics villages and industrial villages. This might be considered a “virtual logistics village” concept which focuses on the cooperation and coordination of multiple sites and multiple towns and counties.
3. Focus on the transformation of agriculture to biotech and higher valued agri-business products including various wood-based or cellulosic products. Developing the U.S. 64 corridor as a “virtual logistics village” is a preferred location where additional infrastructure improvements are needed to enhance the existing excellent infrastructure which covers part of the region.

To further develop these recommended locations the basic needs mentioned earlier are the top priorities:

- Complete and improve U.S. 17 as a multilane highway throughout the entire region
- Seek improvements to the C&A short line railway in cooperation with Rail America
- Complete and improve U.S. 64 as a multilane highway throughout the entire region
- Strengthen Roadways (two-lanes or four-lanes) in developing areas as needed to accommodate specific companies.

## 4 References

1. Albemarle Economic Development Commission:  
[http://discoverec.com/whos\\_here/industrysectors.php](http://discoverec.com/whos_here/industrysectors.php)
2. Boatbuilders. <http://www.boatbuilders.us/north-carolina.htm>
3. Chowan County. [http://www.chowancounty-nc.gov/index.asp?Type=B\\_BASIC&SEC={E44E819A-1C09-4...](http://www.chowancounty-nc.gov/index.asp?Type=B_BASIC&SEC={E44E819A-1C09-4...)
4. Google Earth. <http://www.googleearth.com>
5. Hampton Roads Economic Development Association, 2010 Manufacturing Companies in Hampton Roads, 50+ employees (NAICS 3xx Codes). Updated: September 2010.  
<http://www.hreda.com>
6. Hunter, Mary Elle. (2008) Northeast Region Plans for the Future. *Carolina Business Online Journal*. <http://www.carolinabusiness.net/index.php?articles=199>
7. Martin County. <http://www.martincountync.com/martin-economics.html>
8. North Carolina Biofuels Center <http://www.biofuelscenter.org>
9. North Carolina's Northeast Commission <http://www.ncnortheast.info/>
10. North Carolina's Northeast Commission: County Profiles.  
[http://www.ncnortheast.info/Regional\\_Overview/County\\_Profiles/Default.htm](http://www.ncnortheast.info/Regional_Overview/County_Profiles/Default.htm)
11. North Carolina Northeast, Regional Profile 2010. December 10, 2010.  
<https://edis.commerce.state.nc.us/EDIS/page1.html>
12. Ponder, R. 2010. Firm eyeing 'desert' for wind turbines. *The Daily Advance*, December 20, 2010. <http://www.dailyadvance.com/node/219068>
13. Ponder, R. 2011a. Oregon firm seeks permit for proposed wind farm. *The Daily Advance*, January 27, 2011. <http://www.dailyadvance.com/node/259777>
14. Ponder, R. 2011b. Generating interest: \$750M wind plan gains support. *The Daily Advance*, March 10, 2011.  
<http://www.dailyadvance.com/community/pasquotank/generating-interest-750m-wind-plan...>
15. Site Selection Magazine. "Mega-Sites," January, 2011. (list via email from Steve Appold, UNC-CH).

16. Starnes, R.E. 2011. Broadband, wind to drive growth. *The Daily Advance*, February 24, 2011. <http://www.dailyadvance.com/node/334693>
17. Wilson, C. 2011a. Ground broken on new marine park. *The Daily Advance*, February 2, 2011. <http://www.dailyadvance.com/community/perquimans/ground-broken-new-marine-park-2...>
18. Wilson, C. 2011b. Life on the farm: wind farm, that is. *The Daily Advance*, March 1, 2011. <http://www.dailyadvance.com/node/339322>
19. Wilson, C. 2011. Planners OK permit for wind farm. *The Perquimans Weekly*, May 24, 2011. <http://www.dailyadvance.com/community/perquimans/planners-ok-permit-wind-farm-505...>
20. 2011 County Tier Designations. December 3, 2010.  
<http://www.nccommerce.com/en/BusinessServices/SupportYourBusiness/Incentives/CountyTierDesignations/CountyTierDesignations2011.htm>
21. <https://edis.commerce.state.nc.us/EDIS/maps.html>

## Appendices

### ***Appendix A: Slides from the Governor's Logistics Task Force Meeting on December 15, 2010***

## SEVEN PORTALS STUDY RESULTS: NORTHEAST REGION

Presentation to  
*Governor's Logistics Task Force*

December 15, 2010

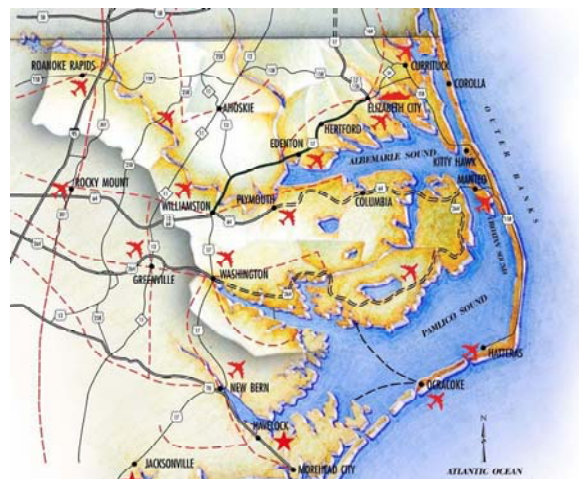
By  
Richard Monroe, Ph.D., Leslie Pagliari, Ph.D., and Paul Kauffmann, Ph.D.  
East Carolina University, College of Technology and Computer Science, Distribution  
and Logistics Program



East Carolina University

Seven Portals Study Team slide 1

### Northeast Region Map



East Carolina University

Seven Portals Study Team slide 2

## Northeast Region

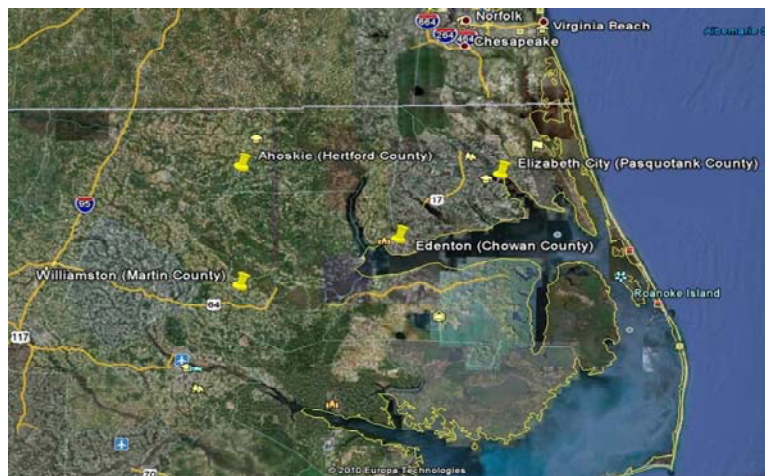
- Regional Statistics
  - Land area of 9,394 Square Miles; roughly the size of the Commonwealth of Massachusetts
  - Population: 363,854 in 2007; est. 375,000 in 2009
  - Civilian Labor Force: 174,312 in 2007; est. 180,000 in 2009
  - Top Employment sectors currently: Retail, Education, Health Care, and Government
  - Approx. 24,000 residents commute to jobs outside the Northeast Region; about half of those commute to VA
  - In Elizabeth City, the Coast Guard employs nearly 2000 with enlisted, civilian and contractors included
  - For 2010, 11 out of 16 counties are rated as TIER 1
    - Currituck, Dare, Perquimans and Pasquotank have been TIER 2
    - Chowan County joined the TIER 2 counties above



East Carolina University

Seven Portals Study Team slide 3

## Northeast Region Potential Sites



East Carolina University

Seven Portals Study Team slide 4



## Northeast Region

- Existing Clusters / actively pursuing:
  - Automotive
  - Aviation
  - Plant Biotechnology
  - Marine
  - Inner Banks (tourism and residential waterfront/golf course property)
  - Tourism



East Carolina University

Seven Portals Study Team slide 5

## Northeast Region

- Main linkages are to Virginia (Norfolk)
- Truck and rail service comes from Virginia
- Barge moves from Norfolk and Charleston, SC; and to Morehead City
  - Scrap steel inbound to Nucor: approx. 10 barges/month or 30,000 tons (times two for a 2nd towing company)
  - Phosphate estimated at 300 barges per year from Aurora to Morehead City
- All airports are general aviation
- Military/Homeland Security have a strong presence and an interest in partnerships (e.g., USCG, NCCAR, Blackwater facility)
- No FTZ currently (application to be filed)
- Land-based wind farm project in Pasquotank County
- "ECO" or "green" industrial park in Camden County
- Halifax/Norhampton - New airport with adjacent Industrial Park with CSX Rail access and close proximity to I-95
- Halifax County actively pursuing Food Processing and Food Distribution as an industry cluster
- Agriculture is still important but focusing on higher value crops in entire region



East Carolina University

Seven Portals Study Team slide 6

## Maps for Major Roads and Rail in Northeast Region



East Carolina University

Seven Portals Study Team slide 7

## Village 1 – Ahoskie

- **Strengths**
  - Located centrally within the western portion of Northeast NC
  - Less than One Hour from Franklin and Boykins, VA; also less than One Hour from Roanoke Rapids, Tarboro and Rocky Mount
  - Less than 90 minutes from the Virginia Port in Norfolk
  - Best highways are US 13 and US 158; NC 11 also important
  - Nucor Steel located in Hertford County at the Chowan River
  - NCVA Rail line from Boykins, VA to Northampton, Bertie and Hertford counties
    - NCVA Railroad office located in Ahoskie; sales office in SC
  - Tri-County Airport is located within 3, 5 and 8 miles of Rail in three different directions
- **Weaknesses**
  - Multiple roads near airport but all are two-lane
- **Needs**
  - Roadway improvements (widening of two-lanes for truck traffic)
  - Better utilization of rail



East Carolina University

Seven Portals Study Team slide 8

## Village 2 – Edenton

- **Strengths**
  - Centrally located within the Northeast Region; 90% of the region is within 60 mile radius for ground transportation; near Biotech activity in Plymouth
  - Less than 90 minutes from Virginia port in Norfolk
    - US 17 and C&A Rail connect Edenton with Norfolk
    - Also less than One Hour from Suffolk, VA
  - Very good airport infrastructure; runway is 6000 feet in length; Stopways add 2000 feet for possible extension; upgrading to ILS Cat. I in 2011
    - Within 6 miles of US 17 Bypass; within 10 miles of US 64
  - Existing barge site is located within ½ mile of the airport location
  - Existing businesses include Boatworks and steel fabricator (MiTek receives steel rolls by barge and produces steel roof trusses)
  - Education programs through COA
- **Weaknesses**
  - C&A Rail spur is inactive; nearest active rail is approx. 6 miles from airport
  - Risk associated with low elevation (approx. 20 feet above sea level)
  - Multiple roads but two-lanes to connect to US 17 and US 64
- **Needs**
  - Make better use of C&A rail; improve rail for higher speeds
  - Reactivate rail spur closer to airport (if there is a business need)
  - Roadway improvements (widening of two-lanes for truck traffic)



East Carolina University

Seven Portals Study Team slide 9

## Village 3 – Elizabeth City

- Tends to be aviation-centric / USCG
- **Strengths**
  - Very good airport infrastructure; runway is 7219 feet in length; new taxiway
  - Within 8 miles of US 17 Bypass
  - Good access to Norfolk, Virginia port via US17
  - Existing business and education activity
    - DRS Technologies; Telephonics; TCOM; ECSU aviation management flight training
  - Coast Guard's long term ties to Elizabeth City
  - Education programs through ECSU and COA
  - Water access for possible barge site
- **Weaknesses**
  - C&A Rail spur is inactive; nearest active rail is approx. 6.5 miles
  - One two-lane road for airport access
  - Risk associated with one dominant company and one dominant customer
  - Risk associated with low elevation (approx. 20 feet above sea level)
  - Room for new business expansion (pending further land acquisition)
- **Needs**
  - Make better use of C&A rail; improve rail for higher speeds; reactivate rail spur
  - Roadway improvements (widening of two-lanes for truck traffic)
  - Pursue increased variety of company/customer activity



East Carolina University

Seven Portals Study Team slide 10

## Elizabeth City Airport/CGAS



East Carolina University

Seven Portals Study Team slide 11

## Village 4 – Williamston

- **Strengths**
  - Centrally located for ground transportation to most of the Northeast Region and to connect with the East Region or the Triangle
  - Three possible sites located along US 64
    - Lands East, Everetts and Jaskey Site
  - CSX Rail runs parallel to US 64 in close proximity to all three sites
  - Everetts (Martin Regional Industrial Park) is within 2 miles of Martin County airport; approx. 110 acres available
  - Good airport infrastructure; runway is 5000 feet in length
  - Lands East is joint development between two counties; approx. 700 Acres
  - Approx. 2 hours from port in Norfolk; approx. 90 minutes from Morehead City
  - Training programs at Martin Community College
  - Jaskey site has access to Roanoke River (possible barge access)
- **Weaknesses**
  - Jaskey site does not have water/sewer/utilities infrastructure in place ([edit: all utilities are available nearby on adjacent site](#))
- **Needs**
  - Borrow the "Virtual Village" concept to bundle 2 or 3 sites along US 64
  - Infrastructure needed at Jaskey site
  - US 17 south from Williamston to Washington Bypass programmed in TIP



East Carolina University

Seven Portals Study Team slide 12

4.1

## ***Appendix B: Interview with Northeast Commission Official***

### INTERVIEW SESSION BY PHONE

OCTOBER 11, 2010

### PARTICIPANTS

Anita Johnson, Vice President for Project Development, Northeast Commission, Edenton, NC

Richard Monroe, Associate Professor, East Carolina University, Department of Technology Systems, College of Technology and Computer Science

October 11, 2010

Phone Interview with Anita Johnson, VP of Project Development, Northeast Commission

Phone # 888-872-8562

I began by asking Anita about rail service and highway issues in the NE Region.

The following are points that she made:

For Rail – VA is working on high speed rail. NE Region has issued a resolution to be considered as part of that study. The route she mentioned was from Tidewater, VA to Weldon in Halifax County and on to Raleigh.

For highway and road projects:

The Mid-Currituck Bridge project is still in the planning stage and going forward.

Camden Causeway (in need of improvement)

DOT should consider Economic Development when establishing tolls on I-95 and possibly on I-85.

US 158 needs paving from Roanoke Rapids to Gates County and up to VA border.

Elizabeth City Airport

- expansion is underway
- DRS Technologies is main tenant for the overhaul of Coast Guard C-130 and other aircraft including helicopters [C-130 work was brought to NC from Canada]
  - 2 hangars currently with possible expansion of 2 additional hangars
- Space also set aside (land available) for aviation management program from Elizabeth City State University which includes flight training
- also for College of Albemarle which is scheduled to begin an airframe maintenance program

Edenton Airport (Northeastern Regional)

- land is available immediately adjacent to the airport
- NC Rural Center has assisted with road improvements and sewer

Martin County Airport and Martin County in general

- land available at “Lands East” Industrial Park which sits on the Martin/Pitt county line

Tri-County Airport

- no info on this location

Northeast Region has “targeted industries” or “clusters” that they pursue currently

- automotive
- aviation, aircraft and aerospace industries
- marine
- biotech agricultural (2008 RTI recommendation and 2 grants for eval./start-up)

Other example industries mentioned:

Research Triangle Institute (RTI) connected with Vernon Jones Research and Extension Center near Plymouth – pilot extraction facility for biotech

Possible Canola farmer in Northampton County currently growing cotton, peanuts and soybeans. Switch to Canola being evaluated for BIO-Diesel Fuel.

MiTek in Edenton – produce steel roof trusses and bring in the steel rolls as raw material by barge from Nucor in South Carolina

Nucor Steel in Cofield in Hertford County. Recent process additions (or improvements) of heat treat and degasser. Some Nucor customers also locating in Hertford County but tend to be very small shops with only a few employees.  
Nucor utilizes Barge, Rail and Truck for transportation.

Perdue (poultry industry) – poultry processing located in Lewiston in Bertie County.  
Grain (poultry feed mills?) – located in towns of Elizabeth City, Colerain and Hertford.

MARCO – is a company which wanted to be close to the VA Port but land cost was too high in VA so they first located in Gates County and then moved to Winton in Hertford County.

Weyerhaeuser facility is near Plymouth (Washington County) but actually located just across the county line in Martin County. Rail is used for a portion of their shipping of wood products. Domtar (Canadian company) bought facility which previously was a Weyerhaeuser paper operation. In the past the facility produced fine paper but is in the process of switching to fluff paper which is used for diapers, bed pads, etc. Also using rail.

I noted that there is a RailLink switching terminal in the Plymouth area which must be in that location due to the presence of the wood and paper companies.

I thanked Anita and suggested that I might want to speak with her again and that I would also like to talk with Vann Rogerson, President and CEO of the Northeast Commission.



## ***Appendix C: Interview with Northeast Commission Official***

INTERVIEW SESSION BY PHONE

OCTOBER 28, 2010

### **PARTICIPANTS**

Vann Rogerson, President and CEO, Northeast Commission, Edenton, NC

Richard Monroe, Associate Professor, East Carolina University, Department of Technology Systems, College of Technology and Computer Science

I told Vann that we could discuss the Northeast Region in general by phone but that I did want to meet with him in person.

Vann began to highlight specific industries and companies in the Northeast Region.

\*Aviation Cluster is a big emphasis

In Elizabeth City – DRS Technologies

Good group of workers established at Elizabeth City.

Edenton – the airport is an old WW II airstrip

Inner Banks – all airports have been upgraded

Halifax County has a unique situation with the development going on in the immediate area of the Airport (new airport opened in 2009, industrial park adjacent to airport, access to rail and close proximity to I-95).

The auto R&D center – NCCAR – defense industry are “big players” with an interest in that development.

Vann mentioned the Logistics Task Force meeting in Elizabeth City on Oct. 18, 2010.

NE Commission puts in a lot of effort working with Hampton Roads.

High Speed Rail – connections from Norfolk to Weldon to Raleigh

Trying to do unique things with the VA Port – “out-of-box” thinking

Inland Port is one idea including a possible “River Inland Port”

Rail track would be upgraded for high speed

Agriculture

- Biotech

Wind Power

Massive Information Pipeline

- Vernon James AG-Biotech research center (patented plant processes)

- Operations for “in-the-field” research

Given the airport focus of the Seven Portals project Vann challenged me to find a way to “Bundle several of the NE airports together”.

NE was very close to the French & AirBus.

Boeing also looked at Elizabeth City.

Coast Guard is established at Elizabeth City.

Innisbrook Golf Course is backed by European money.

Part of “Inner Banks” cluster.

Agriculture history – interesting new niches – also part of the Tourism efforts.

Major Roads:

US 64 and US 17 – major corridors need to be finished

Heritage Corridor for Tourism – Scenic 17 N-S

Highways for industrial companies:

158, 13, 11 & 64

Vann mentioned the “mobility fund for congestion” – the equity formula isn’t radically changed.

Key Corridors

- critical routes that connect “growth opportunities”
- not just based on [current] Population.

Evacuation Route

- US 64

Vann expressed the opinion that if Tolling is added to I-95 then he would hope that I-85 would also have a Toll

- so vehicles do not reroute
- without a Toll on I-85, vehicles on I-95 might reroute to I-85 to avoid the toll and at the same time they would bypass the Northeast Region entirely.

We concluded the phone call as Vann arrived for a scheduled meeting.

We made plans to meet in person within the next two weeks (in early Nov.)

## ***Appendix D: Interview with Beaufort County Economic Development Official***

INTERVIEW SESSION BY PHONE

OCTOBER 29, 2010

### PARTICIPANTS

Tom Thompson, Director of Economic Development, Beaufort County in Washington, NC

Richard Monroe, Associate Professor, East Carolina University, Department of Technology Systems, College of Technology and Computer Science

Phone Interview with Tom Thompson,  
Director of Economic Development, Beaufort County in Washington, NC  
October 29, 2010  
(252) 946-3970

I asked Mr. Thompson about any types of infrastructure needs that would be helpful to economic development in Beaufort County – I prompted him by suggesting highway, rail, or any other transportation infrastructure.

Mr. Thompson prefaced his response by telling me that he has been working in Economic Development since 1973. He responded that he has one pet project and that is US 17. He helped to start the US 17 Association in 1975.

He mentioned that US 17 was the first Post Road built by the Post Office to deliver mail running all the way from Boston to Charleston. US 17 should have been one of the first interstates when the interstates were originally built but for some reason it was never converted to an interstate.

He pointed to US 421 in the western part of NC as being “great”. That’s what he would like to see US 17 be for the eastern part of North Carolina. “US 17 needs to be a four-lane (divided) highway with restricted access.”

The improvement of US 17 would benefit the entire state of NC. The four-lane would assist with Industrial Development but the growth of industry would not be as great as the growth of tourism. US 17 would help to create “tourism friction” – that means getting the tourists to stop (in NC). There is a wealth of history of NC and the US in the eastern part of the state.

Right now along I-95 there is really nothing that tourists want to stop to see. There is nothing of historical significance along I-95. So tourists on I-95 just drive right on through NC as fast as they can (on their way to SC or Florida).

The current US 17 has a lot of inefficiency (with segments that are not up to standard).

The military would also benefit. There are many military bases along US 17 from Norfolk, Cherry Point, Camp LeJuene, Sunny Point and the Coast Guard back in Elizabeth City. All of these military bases use US 17 in many ways – for exercises and for deployment. So an improved US 17 would make movement much easier for the military.

An Economic Impact Study of US 17 has been funded in the past for a total of \$250,000. All of the counties along US 17 in NC were evaluated in that study. [a copy of a 2008 Economic Impact Study of US 17 was located and shared with other Seven Portals teams in the three eastern regions].

Mr. Thompson also sent a copy of a “position paper” by email which is really a Powerpoint presentation. Included in that presentation are several slides referring to Unfunded TIPS projects along US 17. [a copy of this PPT is posted within the folder for the Northeast Region].

I thanked Mr. Thompson for his time and for the information that he shared.

***Appendix E: Interview with Albemarle Economic Development Commission Official***

INTERVIEW SESSION BY PHONE

NOVEMBER 2, 2010

PARTICIPANTS

Wayne Harris, Director, Albemarle Economic Development Commission (AEDC), Elizabeth City, NC

Richard Monroe, Associate Professor, East Carolina University, Department of Technology Systems, College of Technology and Computer Science

Phone interview with Wayne Harris, Director  
 Albemarle Economic Development Commission (AEDC)  
 Elizabeth City, Pasquotank County and Camden County  
 Nov. 2, 2010  
 Office (252) 338-0169 [called on cell at (252) 619-3689]

I explained the basic ideas of the Seven Portals project and then asked Mr. Harris about the role of AEDC and about the companies located at the Elizabeth City Airport.

He told me that AEDC is 96% funded by Elizabeth City and the county. And that AEDC is the only one in the 16 counties (of NE Region) with their own board. AEDC does work with the Northeast Commission (NEC) and he often goes to conventions as a NEC representative because they are paying for the trip. He felt that was a disadvantage because he doesn't really know the entire region as well as he knows his immediate area. He mentioned that he did have some funding from the local Committee of 100 for an upcoming trip and he will be going as the AEDC representative in that case.

The Aviation Research & Development Commerce Park broke ground in 2008.

Regarding the companies at the airport:

DRS Technologies, Telephonics and Elizabeth City State University are currently located at the airport. DRS Technologies has two 80,000 square foot hangars and one machine shop (est. 10,000 to 15,000 square feet). DRS maintains and overhauls the Coast Guard (CG) aircraft including C130, CASA, and FalconJet. The C130 work was brought back from Canada to Elizabeth City. DRS is also now doing overhauls on the Helicopters for the CG. DRS had (has?) a \$1.2 million JDIG grant.

DRS lost some contracts recently to DLS Engineering Services which is a competitor located in Virginia Beach. Top managers at DRS were former CG with very limited experience beyond the CG. They were replaced with a new top manager, Don Davis. Davis has more experience with aircraft industry and defense industry so the new leadership is expected to help DRS by going after new opportunities besides the CG work.

There is space for four additional (or total?) hangars and DRS wants those but will not commit to those hangars until they have a contract. That adds up to a total of 63 acres that will be occupied by DRS. One other hangar is set aside for education with space for ECSU and the College of the Albemarle (COA). ECSU currently holds flight training at the airport but has no dedicated space. The Aviation Airframe Maintenance program at COA has not been launched due to the budget shortfall. About \$18 million (mainly construction cost) is needed for ECSU and COA to locate in facilities at the airport. In the meantime DRS is recruiting workers from Savannah, Georgia in order to find workers with proper certification. COA did have a Golden Leaf grant to get started with some portion of the program. Wayne said that COA was more entrepreneurial in their efforts to get things going.

Telephonics Technical Support Services Center is the 2<sup>nd</sup> business located at the airport and opened earlier in 2010. Telephonics built 15,000 square feet of hangar space and 7,000 square feet office space. They have eight employees at this time. The company provides radar, information and communication systems to the CG and other military and commercial customers. Joe Mahalick (sp) formerly of the Coast Guard Command is one of the top managers at Telephonics.

No airframe maintenance program yet (at COA).



AEDC is in negotiation to acquire another 48 acres which would allow for construction of five additional hangars. The land is part of an estate that is yet to be settled and AEDC is negotiating with the surviving family members. They need to secure the options on that land before December 31 to have access to grant money. Without this purchase AEDC has nothing to market at this time. [other existing spaces tied up by DRS but not built out yet??].

Wayne said that the CG can now do multi-year contracts and make use of capital expenditure (CapEx) rules. [previously CG could only issue one year contracts and could not use CapEx]. This should work to the benefit of DRS to allow them to lock in CG business for more than one year at a time. [also can benefit Telephonics]

Mr. Harris invited me to visit the area and meet with him in person.  
I thanked Wayne and told him that I would email with some optional dates for the visit.

Additional from website:

The Coast Guard's Aviation Logistics Center at Elizabeth City serves the entire aircraft fleet for the U.S. Coast Guard. ([www.discoverec.com/news/news\\_item.php?news\\_id=111&keyword=latest&search=...](http://www.discoverec.com/news/news_item.php?news_id=111&keyword=latest&search=...))

## ***Appendix F: Interview with Northeast Commission Officials***

INTERVIEW SESSION WITH OFFICIALS AT THE NORTHEAST COMMISSION

NOVEMBER 9, 2010

### PARTICIPANTS

Vann Rogerson, President and CEO, Northeast Commission, Edenton, NC

Anita Johnson, Vice President for Project Development, Northeast Commission, Edenton, NC

Richard Monroe, Associate Professor, East Carolina University, Department of Technology Systems, College of Technology and Computer Science

November 9, 2010

Interview with Vann Rogerson, President and CEO of Northeast Commission  
And Anita Johnson, Vice President of Project Development

I asked Vann for an overview of the logistics options in the Northeast.

He mentioned the use of Barges through the Intercoastal Waterway.

He reinforce his suggestion about bundling several Airports (which he mentioned by phone earlier).

For the Albemarle region he suggested that Agriculture, Aviation or some collective would make sense for a logistics village.

He felt that a large impact could be achieved if Kinston (GTP) and Elizabeth City (ECG) were working together.

He referred back to Barges and mentioned that Barge service is available near Edenton (and very near the Northeastern Regional Airport).

A unique combination would be Rail-Barge-Plymouth Airport.

Property available near Elizabeth City:

Tanglewood is in bankruptcy. The site has a large amount of acreage on the C&A Railroad. Sewer is already in place. 4000 to 5000 acres total. Jimmy Winslow was the owner.

Property available near Edenton:

600 acres wraps around the airport. The site was for sale by now off the market.

Halifax County development:

Airport is connected to Industrial Park and rail access with CSX. Also close proximity to I-95. Halifax also invested \$1 million for water and sewer.

12,000 people travel to Virginia for jobs from the four counties from Gates over to Currituck County.

Lowes Distribution Center – located in Garysburg in Northampton County. Large employer. Cross-docking, containers, like and “inland port.”

Trucking companies are located near the VA-NC state line in Camden and Pasquotank Counties.

NCCAR (near Roanoke Rapids) – nearly landed SAAB Headquarters which went to Detroit.

Hampton Roads is largest MSA between Washington, DC and Atlanta according to Vann.

Located in NC to be close to Virginia Port: MARCO shelving for grocery stores.

Originally located in Gates County then moved to Hertford County in Winton.

Edenton – water and sewer expansion. Just expanded a road there.

UPS currently uses Edenton Airport (one flight in and one flight out daily on weekdays).

Barge site – on land nearby to MiTek to bring in steel rolls by Barge to produce steel roof trusses.

In Washington County (Plymouth) – the county bought the Airport. David Peebles is the County Manager. BIOTECH is an important activity in that area.

Other Agriculture discussion:

Produce grown here and sold elsewhere.

New specialty crops (higher value crops).

In Halifax: Empire Food located there and Reesers recently expanded the facility there.

In Edenton: Jimbo’s Jumbo – peanut butter. Had 80 employees and doubled to 160 employees.

Washington County – Rice is a high value crop.

Halifax County – mint plants are used in BioTech (for glaucoma treatment).

Bertie County – clary sage – extraction process to obtain extract which is used in perfume or for other “fragrance” applications. 9000 acres were formerly used for tobacco.

Anita said that “anything ‘plant’ will be our deal in Northeast NC”.

Bringing the discussion back to the idea of the airport being an element in a logistics village.

Vann stated that 1 in 5 companies that they meet with is “foreign money”. So the airport idea makes more sense when taking into consideration the need for executives to fly in to visit the companies.

I asked about the various Higher Education institutions in the Northeast:

For Community Colleges, the College of the Ablemarle (COA) has a branch in Edenton. There is a Truck Driving School in the CC. Training for a new trucking company “Southern Ag.”

Elizabeth City: COA is scheduled to have aviation airframe maintenance program.

Elizabeth City State University has the aviation management program which includes flight training.

Vector CSP in Elizabeth City does all training programs for Logistics for the Coast Guard.

In Roanoke Rapids – there is Halifax Community College.

In Plymouth – Beaufort Community College.

In Martin County – Martin Community College.

All have various Industry-related training programs.

Both Vann and Anita had other appointments scheduled at 2:00 pm so we began to wrap up.

For final remarks, Vann offered:

We need to find a way to partner with the Virginia Port.

Possibly partner with the new development at Craney Island [note added: this is several years away from completion].

In general the Northeast needs to find a way to bring JOBS to North Carolina.

The shortline railroad connecting the VA Port with Edenton could be a key factor.

***Appendix G: Interview and Site Visit with Wayne Harris, Director, Albemarle Economic Development Commission (AEDC)***

INTERVIEW SESSION WITH WAYNE HARRIS, DIRECTOR OF ALBEMARLE  
ECONOMIC DEVELOPMENT COMMISSION, ELIZABETH CITY, NC

NOVEMBER 12, 2010

PARTICIPANTS

Wayne Harris, Director, Albemarle Economic Development Commission (AEDC), Elizabeth City, NC

Richard Monroe, Associate Professor, East Carolina University, Department of Technology Systems, College of Technology and Computer Science

November 12, 2010

Site visit to Elizabeth City with Wayne Harris from Albemarle Economic Development Commission (AEDC) – visited Elizabeth City Airport and Barge Site (separate locations)

Elizabeth City Airport (symbol ECG)

The site has environmental assessment for 180 total acres

63 acres have infrastructure in place which is Phase I of new development

Wayne said he is currently working on “RFI” with another aviation company interested in ECG.

Also negotiating for 48 additional acres or possibly 72 acres which lie immediately adjacent to the 63 acres.

Tamsco built the first hangar and the company was acquired by DRS Technologies (the name may also be listed as DRS C3 & Aviation Group).

ALC is a depot for parts for the Coast Guard (CG).

Vector – is taking the Aviation Logistics Model and trying to apply it to deep water  
[Vector also does all logistics training for CG]

Road to airport – Halstead Blvd becomes Weeksville Rd

Industrial Park separate from airport is fully built out. There is one vacant building with 44,000 s.f. Hockmeyer Equipment Corp. is one occupant of the Ind. Park.

Major employers:

Coast Guard approx. 650 Direct civilian employees and 700 contractors (including ones at ECG)

ECSU has approx. 500 employees

Hospital approx. 100 employees

DRS Technologies has approx. 200 employees

TCOM (blimps and aerostats) – approx. 200 employees

CG base is about 800 acres

Across Weeksville Rd. – the nearest section of the land cannot be developed because it is in the glidepath for ECG runway

From Weeksville Rd. turn left onto Consolidated Rd.

New Taxiway crosses Consolidated Rd from the airport to the Phase I sites. The crossing is setup like a common railroad crossing – signal crossing ARMS are lowered to block the roadway and then large fences open on either side of Consolidated Rd to allow C-130’s or planes as large as 737’s to cross the road on the Taxiway to reach Hangars (future development) on the opposite side Consolidated Rd. The Taxiway and the roadway crossing system are a \$4.2 million investment.



Telefonics (or Telephonics) located at ECG just opened in 2010. Repair radar and looking for other business. New Hangar and office building.

DRS Technologies currently has two 80,000 s.f. hangars which can hold four C-130's at one time. The two hangars are connected by a 10,000 s.f. machine shop.  
[DRS hangar will also serve as emergency shelter for hurricanes].

Fifteen (15) acres out of the 63 acres are set aside as the Academic Site for Elizabeth City State University (aviation management program) and for College of Albemarle (airframe maintenance program). No buildings are built at this time. ECSU has course on their campus and then uses an existing building nearby ECG for meeting for the flight training.

Approx. 23.5 acres (ground lease) reserved for DRS Technologies expansion. They anticipate adding three additional 80,000 s.f. hangars and one smaller building.

No barge site on the CG base or airport but it could be added if there is a need.

TCOM is a few miles away from ECG but visible due to the size of their dirigible hangar. They have a 40,000 s.f. factory for mooring assemblies and a 2<sup>nd</sup> building for aerostats. Originally 50 employees now up to 200 employees. [dependent on military activity in Afghanistan and Iraq].

Railroad spur immediately across Weeksville Rd. near Airport is inactive. Nearest rail is about 6 miles away from the airport.

Dept. of Commerce is also promoting ECG as a potential military aircraft manufacturing site.

Possible wind farm development – 300 megawatt capability [most jobs for construction and some longer term employment but very few needed for actual wind farm operation].  
“Need a robust transportation infrastructure” [to bring in the wind turbines and associated equipment]. Also need access to the grid and there are several good locations nearby in the region to connect to the grid. The project is estimated at \$750 million. Iberdrola (Spanish company) is the company looking at Pasquotank County (and other locations in the Northeast). The company likes the Northeast Region because there are easy points to connect to the grid.

We also drove to the Barge Site on the north side of Elizabeth City (about 8 miles away from the airport). A large Seafood Distributor is located near that site but does not appear to use Barges.

Barges can travel Dismal Swamp Canal (also called the “ditch”) – can travel from Norfolk or Portsmouth to Elizabeth City.

South Mills in Camden County also has a Barge Site.

There was a Rail Spur at the Elizabeth City Barge Site. Near the Rail Spur was the Seafood distributor (Quality Seafood), a Concrete factory and a Wood products operation. Bill Owens owns the two Barge Sites – 12 acres and 22 acres.

Two low bridges cross Knobbs Creek on Business 17 (or Alt. 17) on the way to the Barge Site. Wayne said that they had asked that when the bridges are replaced that the height of the bridges be raised to at least allow a canoeist to pass underneath.

Back at ECG:

DRS Tech. also has \$180,000 lease for parking for DRS employees.

Infrastructure includes city electric, sewer and water.

There is an agreement that the city will not annex the site to guarantee that only county taxes will be paid.

Near US 17 Bypass: Wal-Mart is a satellite annexation (which is allowed) so that the city does collect taxes.

There would be 9 sites available if AEDC is able to purchase the full 72 acres adjacent to the airport.

At Tanglewood (est. over 4000 acres but actually listed as over 5000 acres)

- no infrastructure and was priced at \$80k/acre (Note: not confirmed)

PCCP development - \$30k/acre with water and sewer (Pasquotank County Commerce Park)

City is also exploring a \$16 million reverse osmosis facility for the water supply. If successful this would be a big advantage over other NC areas given the drought conditions in recent years.

Camden County is developing a “green park” or “Eco” industrial park.

Camden County dropped out of AEDC so only Pasquotank and Elizabeth City belong to AEDC.

The Bottleneck on US 17 is main problem to get to the VA Port (later info from Peter Bishop of Currituck County indicated that the real bottleneck on 17 is in VA in vicinity of Chesapeake)

Local politicians or other officials offering support:

Rich Olson, City Manager, Elizabeth City – described as hard driving

[former city manager for Delray Beach, FL]

Mark Bassenight [sp?] and Bill Owens. Both in the NC House of Reps.

Richard Wall, NCDOT, Aviation Division [Big Help with projects at ECG]

Scott Hinton, Airport Manager (former CG pilot)

Wayne Harris mentioned that nearby in Virginia: Suffolk, VA currently has 1.4 million s.f. of Distribution Center space according to Wayne.

## ***Appendix H: Attendance at NEED Monthly Meeting***

BRIEF INTERVIEWS WITH SEVERAL ECONOMIC DEVELOPMENT OFFICIALS FROM  
THE NORTHEAST ECONOMIC DEVELOPERS (NEED)

NOVEMBER 19, 2010

### ***No Transcript***

A brief explanation of the Seven Portals was presented by Richard Monroe, Seven Portals Team Member. The meeting was attended by 20 individuals from the 16 counties and other associated agencies.

*Individual discussions occurred with Marvin Davis from Martin County, Peter Bishop from Currituck County, Bob Peele from the Wanchese Seafood Industrial Park, Dave Goss from Perquimans County, and short discussions with other attendees prior to the meeting and during lunch.*

## ***Appendix I: Interview with Northeastern Regional Airport Manager***

INTERVIEW WITH AIRPORT MANAGER AT NORTHEASTERN REGIONAL AIRPORT

NOVEMBER 19, 2010

### PARTICIPANTS

Harry Davis, Airport Manager of Northeastern Regional Airport, Edenton, NC

Richard Monroe, Associate Professor, East Carolina University, Department of Technology Systems, College of Technology and Computer Science

November 19, 2010

I met Harry Davis the Airport Manager in the office area of the Northeastern Regional Airport (symbol EDE) in Edenton, NC.

I asked about the capabilities of the airport for air cargo as it is today and whether a runway extension would be needed. Mr. Davis stated that the airport was good for air cargo right now. He said that the airport could accommodate DC 9's, 727's and 737's which are often used for air cargo. Anything larger than those aircraft would require extensions to the runway [and the stopways provide space for possible extension]. The runway is approximately 18 inches of reinforced concrete and is "weight capable."

The landing system currently is "non-directional, LPV approach". An upgrade to Instrument Landing System (ILS) – Std. Category I is due to be completed by March, 2011.

The EDE airport tried to attract Global Express and a seaplane manufacturer but lost out on both attempts. The seaplane manufacturer was attracted to EDE for the access to the water nearby the airport and access to a good landing field. The seaplane company chose a location in Florida instead.

Mr. Davis mentioned that HondaJet in the Greensboro area is a great example of the type of company that could locate at the airport. He also mentioned Cessna Skycatcher as an example company that looked at Elizabeth City but ultimately decided on locating in China.

Mr. Davis stated that EDE wanted to develop a partnership with Elizabeth City State University (ECSU) and he felt that Dr. Gilchrist and Dr. Sharp from ECSU supported the idea of working with EDE. [Note: This resulted in ECSU working with EC/CGAS airport for the aviation management program which includes flight training].

Mr. Davis stated that the labor pool is good.  
Unemployment is approximately 10% in the area.

I asked about the distance to rail service:

Mr. Davis said that the rail spur was de-activated at the nearest point to the airport. But water access and highway access is very good at the airport.

There is ample room for hangars and offices to be built on the airport site. Plus the Industrial Park is immediately adjacent to the airport. [Note: approximately 600 acres available]

I also asked for estimates of distances to US 17 Bypass.

Mr. Davis said that the Bypass was about 6 miles from the airport. He added that the Edenton campus of College of Albemarle (COA) is about 4 miles from the airport.

Mr. Davis offered to discuss any other questions at another time if needed.

Mr. Davis had to leave the airport and we ended the interview/discussion at this point.

***Appendix J: Interview with Simon Rich, III, owner/operator of Stevens Towing (barge service)***

INTERVIEW SESSION BY PHONE

NOVEMBER 29, 2010

PARTICIPANTS

Simon Rich, III, owner/operator of Stevens Towing (barge service) in Edenton, NC

Richard Monroe, Associate Professor, East Carolina University, Department of Technology Systems, College of Technology and Computer Science

## No Transcript

Synopsis of discussion:

There are two towing companies serving Nucor; both companies operate one Barge per workday or about 20 Barges per month. Stevens transports about 30 tons of scrap steel per month and the second company would do roughly the same for a total of about 60 tons of scrap steel per month.

Barges operate everyday from Aurora to Morehead City to transport Phosphate to the port (estimated to be one barge per day).

Going back 25 to 30 years ago many local companies operated their own Barge sites (such as Weyerhaeuser). Most of those sites have gone inactive and companies do not know how to go about reactivating those Barge sites (if they wanted to do so).

Other materials shipped by barge include rock or gravel for the concrete industry.

Other materials shipped by Barge include rock, sand and other materials for reef and beach restoration.

***Appendix K: Preliminary Rail Findings for Northeast Region***

Submitted on October 12, 2010



**Preliminary Report from East Carolina University  
October 12, 2010**

**Rail Findings for Northeast Region**

Chesapeake & Albemarle (CA) and North Carolina Virginia (NCVA) railroads are Shortlines operating between Virginia and North Carolina. The Class I railroads of Norfolk Southern (NS) and CSX do operate in limited areas of the region – so they operate very much like a shortline.

The following table will summarize our preliminary findings for four possible logistics villages in the Northeast Region:

<b>Potential Logistics Village/ Characteristic</b>	<b>Elizabeth City Airport (ECG) (Pasquotank County)</b>	<b>Martin County Airport (MCZ) (Williamston)</b>	<b>Northeastern Regional Airport (EDE) (Edenton, Chowan County)</b>	<b>Tri-County Airport (ASJ) (Ahoskie, Hertford County)</b>
Railroad in area	Chesapeake & Albemarle (CA)	CSX	Chesapeake & Albemarle (CA)	NCVA (same company as CA)
Nearest town with rail	Airport is approx. 3 miles southeast of center of Elizabeth City	Everetts is nearer to airport compared to Williamston	Airport is approx. 3 miles southeast of center of Edenton	Woodland and Aulander are closer to airport than Ahoskie
Distance to nearest rail	Approx. 0.5 mile; DRS Technologies adjacent to airport is approx. 0.25 miles to RR	Approx. 1.5 to 2.0 miles South of airport	Approx. 1.5 to 2.0 miles West of airport	Approx. 2.5 miles to Woodland and approx. 4.0 miles to Aulander
Nearest roads/highways	Route 344 which is Weeksville Road, Halstead Blvd. And Halstead Ext. to Highway 17 (to Virginia northbound or Edenton southbound)	Highway 64 (Interstate quality 4 lane)	Haughton Rd. and Yeopim Rd. to Highway 17; Haughton Rd. east and south (routes 32 and 37) to highway 94 to Albemarle Sound Bridge and cross to Washington County	Routes 35, 305 and 561 near airport; Routes 258 and 35 at Woodland; Routes 305 and 11/42 near Aulander

Note: distances are estimated using Google Earth and subject to revision

The following section will discuss some of the other characteristics of each of the four logistics village candidates.

### **Elizabeth City Airport**

The Elizabeth City airport is located three miles southeast of Elizabeth City and adjacent to the Pasquotank River and the Albemarle Sound which is part of the Intracoastal Waterway (via Elizabeth City). The Chesapeake & Albemarle Railroad passes the airport very nearby – within 1/2 to 1 mile depending on the point of reference.

Main factors:

- Very close proximity to the C&A Railroad line for BULK shipments from the Virginia Ports
- On-site development by DRS Technologies for U.S. Coast Guard aircraft maintenance and overhaul; recent addition of 2<sup>nd</sup> Hangar by DRS Technologies and addition of jobs
- Close to Highway 17 for northbound trips to and from the Virginia Ports in Chesapeake, Portsmouth and Norfolk
- Close to Highway 17 for southbound trips to other points in Northeast Region or to western point of NC

Needs:

- Rail siding/terminal in close proximity to airport
- Runway is more than 7000 feet (so OK)
- Taxiway pavement is described as very rough (<[www.airnav.com/airports/KECG](http://www.airnav.com/airports/KECG)>)

### **Martin County Airport**

The Martin County Airport is located near the middle of the county and also is very near the middle of the Northeast Region when measured diagonally from the Southeast corner to the Northwest corner. The nearest railroad is the CSX line running East to West from Plymouth out to Rocky Mount. The town of Everetts is the nearest rail location to the airport.

Among the NCDOT Rail Division materials on “Industrial Access” there was a rail project completed in FY 2004 for Syfan Manufacturing which is located in Everetts ([www.bytrain.org](http://www.bytrain.org)). The company is a manufacturer of shrink wrap (plastic film) and uses rail for incoming raw materials.

The land between the Airport and Everetts appears to be mainly farmland with no residential and no commercial buildings in between the two points. Everetts is also less than one mile to the intersection with major highway 64.

Main factors that make the Martin County Airport site attractive include:

- Close proximity to CSX railroad in Everetts
- Close proximity to major highway 64 (Interstate quality four lane) for Eastbound traffic or Westbound to reach Rocky Mount and I-95
- Possibility of available land nearby the airport for development

**Needs for this location:**

- Select a site to take best advantage of the airport and rail
- Runway extension to 7000 feet
- Two roads may need rerouting in order to extend runway

### **Northeastern Regional Airport (or Edenton Municipal)**

#### **Main Factors:**

- End of C&A rail line is less than 2 miles from the Airport for possible BULK shipments from Virginia Ports
  - Need to check land availability and possible wetlands issue between rail and airport
- More centrally located within the Northeast Region
- Close proximity to Highway 17 for ground transportation to and from the Virginia Ports
- Close proximity to Highway 17 for trips South and West through the Northeast Region
- Close proximity to Biotechnology development in the Washington County and Bertie County areas – Plymouth and Merry Hill are towns involved

#### **Needs for this location:**

- Runway is currently 6000 feet in length; land appears to be adequate to expand to 7000 feet; existing 1500 feet for “Stopway” at North end and 500 feet for “Stopway” at South end of runway are already part of the airport property (<http://www.airnav.com/airport/KEDE>).
  - Assumes that with runway at 7000 feet the same size Stopways would not be needed.

### **Tri-County Airport (located near Hertford, Northampton and Bertie county lines)**

The Tri-County Airport is located near the middle of the V-shape of the NCVA Railroad which runs South from Virginia and crosses parts of Northampton County and Hertford County into Bertie County and then back to the Northeast across Hertford county through Ahoskie and ends at the Chowan River in Tunis (near Winton).

Rail locations are near the town of Woodland in the west, approximately 2.5 to 3 miles away from the airport, and the town of Aulander which is approximately 3.5 to 4 miles Southeast from the airport. These two towns represent the nearest points for the rail in proximity to the airport. Woodland includes the intersection of routes 258 and 35 for ground transportation. Aulander is near an intersection between routes 305 and 11/42. Closer to the airport within one-half mile are routes 35, 305 and 561. The combination of those roads is an estimated 2.5 to 4 miles from the nearest railroad. Ahoskie is also located close to the railroad but at a greater distance from the airport (approximately 8 to 11 miles east of the airport along route 561 and St. Johns Hwy. which becomes 1<sup>st</sup> Street in Ahoskie).

The main factors that make the Tri-County Airport area an attractive choice include:

- Close proximity to Virginia and the rail and highway corridor connecting to the Virginia Ports and transfer stations in Suffolk, Portsmouth, Chesapeake and Norfolk.
- The present infrastructure for the NCVA Railroad is under-utilized. The NCVA Railroad branches off of the CSX line in Boykins, VA to make the trip across parts of Northampton, Hertford and Bertie counties.

- Close proximity to western transportation connections in Weldon, Roanoke Rapids and I-95.
- Mainly undeveloped farmland in surrounding area – some sites available
- CA and NCVA Railroad office is located in Ahoskie.
- For 2006 shipments from Hertford terminal to Northampton terminal were 22,399 carloads which was highest number for NC Short Line Railroads (NC Statewide Logistics Plan)

Needs for this logistics village include:

- Rail siding/terminal in one of the two locations (Woodland or Aulander)
- Possible road improvements between the Airport and the chosen rail siding
- A runway extension to 7000 feet is needed. Some land North of the runway is open but highway 561 is a constraint South of the runway.

### **RELATED TRANSPORTATION DISCOVERY**

Current companies in the Northeast Region are shipping some materials via BARGE. One Nucor Steel customer actually receives barge shipments from the Nucor Steel facility in South Carolina (Mt. Pleasant?). [from interview with Anita Johnson, VP of Project Development for the Northeast North Carolina Commission for Economic Development].

### **RELATED DISCOVERY OF DEVELOPMENT UNDERWAY**

#### **Chocowinity Industrial Park**

Southtech Plastics moved away from Craven County (Eastern Region) and moved to Beaufort County (Northeast Region) in 2009. A new railroad siding was added just for the Industrial Park. Southtech uses rail for inbound raw materials. The Chocowinity Industrial Park boasts the following features and infrastructure enhancements:

- 274 acre industrial park
- Four-lane road (new)
- Railroad siding (new)
- Norfolk Southern rail service
- 12-inch gas line

\$1 Million of Golden Leaf funding has already been provided to this Industrial Park development. Southtech used only 10 acres which leaves 264 acres that may be available (to be checked for other new occupants).

Note: the initial portion of this information was first discovered via [www.bytrain.org](http://www.bytrain.org) and “Industrial Access” under the projects completed.

NOTE: both of the recent RAIL projects involved Plastics companies – Syfan Manufacturing in Everetts and Southtech in Chocowinity. Of course the entire Industrial Park gained access in the latter case.

**SUMMARY of Outreach Efforts with NCDOT and RPOs (no MPOs in Northeast)**

<b>Person</b>	<b>Organization</b>	<b>Date contacted (Email or phone)</b>	<b>Follow-up or Feedback received</b>
Kerry Morrow	TPB NCDOT for Peanut Belt, Albemarle and Mid-East RPOs	April 7, 2011 (Email)	Email feedback from Kerry on April 15
Saeed Mohamed	TPB NCDOT	April 7 (shared by Kerry Morrow)	Included with Kerry's feedback on April 15
<i>Ann Whitley</i>	<i>Peanut Belt RPO</i>	<i>April 7 (direct email from Monroe based on RPO website)</i>	<i>Not currently working; see Denise Boswell below</i>
<i>M. Jethro</i>	<i>Albemarle RPO</i>	<i>April 7 (direct email from Monroe based on RPO website)</i>	<i>No longer working with RPO?</i>
Denise Boswell, PhD	Temporarily covering Peanut Belt RPO for Ann Whitley (Denise is also a planner in Wilson, NC)	April 7 (Email forwarded by Kerry Morrow)	Email with detailed feedback from Denise received on April 20
Steve Lambert	Albemarle RPO	April 7 (direct Email from Monroe & forwarded by Kerry Morrow); responded to Denise and Steve on April 13 to allow more time for them to review Draft of report	Follow-up Email to Steve again on April 25; left phone message on April 25
Gretchen Byrum, P.E.	NCDOT, Division I – District I Engineer	April 25 (two direct Emails from Monroe); April 27 (one reminder email sent)	Follow-up phone voicemail left on April 25; left another voicemail on April 27
Jerry Jennings, P.E.	NCDOT, Division I Engineer	April 25 (Email) April 25 (Reached by phone)	Feedback received on April 25 (Reached by phone)
Bryant Buck	Mid-East RPO	Between April 7 and 15 - Discussed by Saeed Mohamed, the TPB contact for Mid-East RPO	Feedback through Saeed and Kerry on April 15